Puget Sound Region





Best Practices and Lessons Learned Report

Regional Catastrophic Disaster Coordination Plan

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Section I. Introduction

For the past three years, a team consisting of representatives from eight counties in the Puget Sound Region of Washington State (Island, King, Kitsap, Mason, Pierce, Skagit, Snohomish and Thurston counties) and their associated cities and special purpose districts have worked in partnership with State, federal and Tribal partners to establish regional disaster response and recovery plans. This partnership approach



is very consistent with the Federal Emergency Management Agency's (FEMA's) Whole Community philosophy. As Craig Fugate, FEMA Administrator, noted in his testimony¹ before the United States House Transportation and Infrastructure Committee, Subcommittee on Economic Development, Public Buildings, and Emergency Management, FEMA is not the nation's emergency management team–FEMA is only a part of the team.

"...In order to successfully prepare for, protect against, respond to, recover from, and mitigate all hazards, we must work with the entire emergency management community. This "Whole Community" includes FEMA and our partners at the federal level; our state, local, tribal and territorial governmental partners; non-governmental organizations like faith-based and non-profit groups and private sector industry; and most importantly, individuals, families, and communities, who continue to be our greatest assets and the key to our success.

In order to fulfill our mission, we must recognize that these parties are all important participants in the emergency management community, and that we work together as one team."

The plans and annexes the Puget Sound team worked to develop included nine regional catastrophic preparedness documents: Puget Sound Regional Catastrophic Disaster Coordination Plan, Pre-Hospital Emergency Triage and Treatment Annex, Evacuation and Sheltering Annex, Long Term Care Mutual Aid Plan, Regional Resource Management and Logistics Plan, Structural Collapse Rescue Annex, Transportation Recovery Annex, Victim Information and Family Assistance Annex, and Volunteer and Donations Management Toolkit. A tenth planning document, "Public Awareness Campaign," is still under development.

Approximately 75 percent of project funding came from the US Department of Homeland Security Regional Catastrophic Preparedness Grant Program (RCPGP). One of the grant requirements is that participating jurisdictions document best practices and lessons learned from their planning initiatives. One of the administrative projects established by the Region was devoted to satisfying this requirement. A team of experienced consultants worked with Project Leads and other subject matter experts to document best practices and lessons learned from

¹ "Improving the Nation's Response to Catastrophic Disasters: How to Minimize Costs and Streamline our Emergency Management Programs", March 30, 2011 Rayburn House Office Building

each of the projects. The goal was to allow other jurisdictions to leverage the experiences from this planning process.

Since the Project Leads were the best source of information on the individual projects, the consulting team relied on the information they provided, typically through in-person interviews, as a primary source of information for the best practices/lessons learned assessment. A member of the consulting team did a preliminary review of each of the planning documents and culled relevant information where it was available. The consultants also reviewed other written background information where appropriate. After this information was gathered, the consultants prepared written drafts of each of the best practices/lessons learned write-ups for the appropriate Project Lead to review. Section II of this report, Project Assessments, contains that information.

The project administrators and consulting team embraced the grant requirement to document best practices and took it one step further. While meeting with Project Leads and other members of the emergency management community to document best practices and lessons learned on the current group of planning projects, why not use this as an opportunity to document other successful projects and initiatives in the Region with the hope that information might be leveraged elsewhere as well. Section III of this report contains that information.

The grant guidance did not provide any explicit information on what constitutes a best practice or lesson learned, but FEMA's Lessons Learned Information Sharing web site (LLIS.gov) did contain a working definition that seemed appropriate for these purposes:

Best Practices: peer-validated techniques, procedures, good ideas, or solutions that work and are solidly grounded upon actual experience in operations, training and exercises.

Lessons Learned: knowledge and experience, positive or negative, derived from incidents and historical study of operations, training and exercises.

After documenting the best practices and lessons learned from the individual projects, the consulting team formed some overall conclusions and observations. That information is summarized in Section IV of this report.

Section II. Project Assessments

As part of their project management guidance, the Project Leads for the regional catastrophic planning projects were asked to identify best practices and lessons learned for each of their projects. In some cases the Project Leads included this information as a part of their planning documents and in other instances it was separately maintained. The Best Practices and Lessons Learned consulting team reviewed all of this documentation as part of their assessment. In addition, each of the Project Leads was individually interviewed to gather additional information.

Section II, Project Assessments, provides a brief summary of each project and then an itemization of the best practices and lessons learned.

A. Puget Sound Regional Catastrophic Disaster Coordination Plan

The Puget Sound Regional Catastrophic Disaster Coordination Plan was developed to assist local, State, federal and private sector partners in coordinating their planning, response to and recovery from, regional catastrophic incidents and disasters. The Coordination Plan is voluntary and available to all public, private, Tribal and non-profit entities in the eight-county Puget Sound Region.

A set of issue-specific annexes supplement the Coordination Plan and provide more detail about critical regional emergency response functions. The initial topics were selected because they were the most commonly identified as "gaps" in the Region's preparedness as documented in FEMA's Nationwide Plan Review. Neither the Coordination Plan nor its annexes will usurp or infringe on the authorities, plans or procedures of any participating jurisdiction, agency or organization.

... The bottom line is that no local, state, or federal government can go it alone. The only way to a successful catastrophic response is with all assets and capabilities integrated and working together. ...

Joseph F. Bruno – Commissioner – New York City Office of Emergency Management

1. Best Practices

- Being able to confer with some of the nation's emergency management subject matter experts can be a great catalyst to a planning process. Conference phone calls were typically used in the past to meet this need. Video conferencing provides a much richer communication environment. A videoconference was established with experienced leaders with coordination experience related to major incidents (Arlington regarding the nation capital's 9/11 incidents, Mississippi regarding Katrina and San Diego regarding wildfires). Since the Pacific Northwest Region has yet to experience a truly catastrophic event, this was a great learning opportunity.
- Getting senior leadership involvement and keeping them appropriately involved through the
 planning lifecycle is key to the success of any major project. That was established early on
 as a goal for all of the regional projects, one that was generally met.

2. Lessons Learned

- The FEMA initiated National Planning Workshop in San Diego provided a great opportunity to interact with planning staff from other jurisdictions. Being able to exchange information on successes and brainstorm ideas on common challenges was a tremendous benefit for the participants.
- Project leads were well-motivated and skilled emergency management professionals, but not all of them had managed planning processes of this nature before. Investing resources up front to provide project and consultant/contract management training would have been beneficial.
- There is a great deal of diversity (size, demographics, longevity of emergency management organizations, emergency activation history, etc.) in this planning region. Some jurisdictions do not have documented plans in areas where they have little or no experience, such as large shelters or donations management. In cases such as these, there is a benefit to developing capability at the local level for large incidents before writing a plan for a catastrophic disaster, recognizing that coordination needed during a catastrophic incident may be very different than that used for a disaster with less impact.
- Increased collaboration among the RCPGP national sites from the early days of the program design would have benefited the strategic planning about the program deliverables. For example, the Bay Area site developed local capacity in a number of areas in order to make regional coordination feasible (i.e. cannot coordinate local plans if no local plans exist). Awareness of other sites' progress may have "raised the bar" for everyone.
- The ability to modify the RCPGP "region" to better fit existing planning regions (e.g. Homeland Security Regions, Metropolitan Planning Organizations, etc.) was used but further tailoring would have been a more efficient and effective approach to improve mutliagency coordination.
- Increased collaboration between and among FEMA Headquarters and RCPGP national sites would have improved the Technical Assistance deliverables. These appear to have been somewhat uneven across the country, depending upon consultant staff expertise and the ability of the site to articulate their needs.
- Especially in home rule states where so much of the success in a catastrophic event may hinge on less formal inter-jurisdictional cooperation, relationship development and management is a continuous process. During the 2006 Nationwide Plan Review, the lead consultant noted how well this area's emergency management staff worked together and the strong sense of teamwork. While that is true on some levels, issues with respect to shared responsibility, delegations of authority and communication remain challenges. More multi-jurisdictional exercises are needed to adequately test/refine regional plans.
- There is a great deal of good work going on in emergency management in this Region. More opportunities are needed to showcase that work. Other jurisdictions within the Region may be able to adapt others' products to meet their needs and this may help improve local and regional collaboration and effectiveness.

- In addition to the regional catastrophic planning effort, there is also a State catastrophic planning effort. It is important to find ways to keep the products in harmony with one another.
- With large and complex planning programs, it is important to identify and get all of the stakeholders on board at the outset. Federal, State emergency management and other agency staffs were critical to plan development and review. It is important to clarify and solidify their roles and engage them in meaningful ways throughout the planning process and evaluation.
- Especially with multi-project development programs like this, it may be worthwhile to develop a formal product review process in advance. There are a variety of mechanisms (e.g. peer review, independent team, etc.) that may help build better overall products.
- In a home rule state, reaching agreement on what is an acceptable level of coordination between agencies can be a challenging undertaking. It is important to have champions at the leadership level who will advocate for an optimum approach.

3. Regional Contact Information

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B. Pre Hospital Emergency Triage and Treatment Annex

The purpose of the Pre-Hospital Emergency Triage and Treatment Annex is to provide an all-hazards framework for planning and response coordination among Emergency Medical Services (EMS) providers and other entities that share the responsibility for the management and provision of the pre-hospital response to a catastrophic incident, regardless of its cause.



The Pre-Hospital Emergency Triage and Treatment Annex is

based upon established principles of emergency management defined within the National Incident Management System (NIMS). It emphasizes mechanisms of response coordination since the Puget Sound Region has no inherent jurisdictional authority for emergency response. Therefore, the coordination processes for pre-hospital response described in the annex do not usurp or infringe upon the formal chain of command during incident response

The Annex provides a coordinated approach for pre-hospital responders to collect and share information across the Region in order to develop a common operating picture of the pre-hospital response, establish response priorities and develop recommendations to address strategic or policy-level issues. This annex does this by establishing an EMS Coordination Group to coordinate pre-hospital preparedness and response activities for the Region.

1. Best Practices

- One of the important goals of this annex is to help ensure patients reach the right location for treatment in a timely manner. This required a planning process that developed a good understanding of regional EMS and hospital capacity, where capacity gaps were likely to occur and how those could be closed on a regional basis.
- Coordination between health, emergency medical and the emergency management communities is critically important, but in the past the Region lacked some of the coordination opportunities to support their needs. The recommended EMS Coordination Group will provide strategic and policy-level coordination for the regional pre-hospital response without impacting tactical response plans or protocols at the local jurisdictional level. The role of the EMS Coordination Group during response is to:
 - ✓ Provide policy level leadership and strategic coordination for the pre-hospital response,
 - ✓ Share information across jurisdictions to develop situational awareness of the regional pre-hospital response,
 - ✓ Develop recommendations for incident response priorities at a regional level when the pre-hospital system is severely strained or overwhelmed,
 - ✓ Support a coordinated strategy for the distribution of patients to area hospitals based on patient need and a concurrent assessment of hospital capabilities during incident response, and
 - ✓ Develop consensus recommendations on strategic or policy-level issues, such as the allocation or reallocation of resources, the establishment of Field Treatment Sites or the implementation of state protocols establishing the standard for field performance in a catastrophe.

2. Lessons Learned

- Stakeholder selection and participation are important. Public health, emergency medical services, hospitals and emergency management all have roles in this issue. Some have an immediate role, some longer term and it is good to sort that out up front in the planning process so the right agencies and staff are participating at the appropriate times.
- Ideally State emergency management staff would have been involved sooner in this project.
 Having their role clearly identified and communicated would have been desirable.
- Managing change is difficult, especially when many stakeholders are involved. Being too
 aggressive with what is being proposed in the scope of a planning project can make it
 difficult to get stakeholder buy in.

3. Regional Contact Information

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C. Evacuation and Sheltering Annex

This annex was developed to provide a framework for the coordination of efforts that must happen at the local, county, regional and state levels in the event of a catastrophic incident such as a major earthquake, flood or biological weapon attack. It is anticipated that tens of thousands of people may need to be evacuated and/or need to be sheltered in any of these events. Coordination of regional assets, resources and information will be the basis of the regional response. It is the expansion of local capacity for sheltering of both people and pets that will enable the Region to successfully shelter many displaced people.

Considerations for regional coordination of evacuation and sheltering facilities among multiple agencies should include establishing transportation routes, identifying appropriate modes for those without cars and movement of functional needs or

"As part of a risk management strategy, evacuation planning can be used to mitigate the effects of an emergency or disaster on communities."

David Templeman Director General Emergency Management Australia

vulnerable populations. Shelters will require adequate food, water, bedding, facilities and other supplies as well as staffing needs. Multiple agencies and organizations must work together to achieve success.

1. Best Practices

- One of the participating jurisdictions (King County) developed an Evacuation Template that
 is now being leveraged not only within this eight county region, but elsewhere in the State.
 In addition to making this resource available to others, staff from the Washington State
 Emergency Management Division and King County is providing hands-on workshops to
 help other agencies use this resource effectively.
- A number of the regional planning projects conducted on-site discussions with each of the participating jurisdictions. Given the diversity of the counties and their geographic distribution, this was a particularly important step to ensure stakeholder buy-in and participation for the sheltering project. Telephone calls or even video conference calls are not as effective as face-to-face contact.
- To help generate stakeholder buy-in as well as enhance the value of the plan, the team attempted to make it scalable and to identify components that could be used to support response and recovery from smaller, localized incidents. For a region that has yet to experience a truly catastrophic event and does not routinely experience disasters requiring evacuations, these are important steps to make this document useful and relevant.

2. Lessons Learned

- Undertaking concurrent planning processes on a large number of regional projects can be difficult to coordinate. There are often interrelationships between plans. Having an agreed upon way to resolve or at least substantively discuss those issues early on in the process can make the overall planning process go easier. There are also sequencing and dependency issues between plans worthy of discussion up front.
- It was sometimes difficult to get information from other jurisdictions, especially those seen as leaders in this planning area. Planning teams from other regions were also competing for

- their time. The Virtual Joint Planning Office set up by FEMA could be a good clearinghouse for information, but because specific guidance for its use was not consistently provided and all jurisdictions were not using it, it was not as effective as it could have been.
- Project leads had a great deal of autonomy to design their respective processes. Plan format and general direction was discussed with the project leads, but unless assistance was requested they were left to work out the details within their individual teams. The upside of this was that it instilled ownership and buy-in at the team level. The downside is that it created additional work after drafts were developed to create more consistency across plans.

3. Other Comments

- To help guide and drive their planning process, early on the team formalized their assumptions in a document, "Planning Considerations for High Risk Individuals in the Puget Sound Region." This document contains many useful references that other jurisdictions have found of value.
- Internal emergency management agency staff produced this plan without the use of any consultants. This helped ensure a high degree of ownership and buy in and should make it easier to maintain and enhance the plan in the future.

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D. Long Term Care Mutual Aid Plan

This planning process enhances medical preparedness and response capabilities for evacuation and patient movement through the development of a Long Term Care Mutual Aid Plan for long term care facilities. It addresses a critical planning gap related to the evacuation of medically fragile residents cared for in these facilities. The Plan, which serves as the foundation for the mutual aid agreement, outlines the alert and notification process, the



resources available in the Region, the types of beds available by facility and the steps that each facility should follow in an event that requires an evacuation. Key among these steps are protocols to keep medical records and patient information with the patient as they are transferred between facilities and to notify their family and primary care physician of the move.

The plan also identified over 700 transportation assets that reside at various long-term care facilities that can be made available to transport patients during an evacuation incident or event. All signatories to the plan agree to maintain the appropriate amount of supplies, equipment, staffing and other resources required to support 110% of their licensed bed capacity.

The plan ensures a coordinated operational evacuation plan for long-term care facilities that includes roles and responsibilities of key agency partners such as emergency management and emergency medical services.

1. Best Practices

- The Patient Tracking Steering Committee, how it was constituted and managed, was a best practice. Key stakeholders included subject matter experts and representatives from participating counties, nursing homes, Emergency Medical Services, State and local emergency management, Seattle Aging and Disability Services, the Department of Social and Health Services and Washington Healthcare Association. These agencies were involved from the outset and their input actively sought during the project lifecycle.
- One of the critical success factors for this project was having a highly experienced
 consulting team to work with, one that possessed true subject matter experts with strong
 facilitation skills. Regional planning staff had also worked with this consulting team before
 and the preexisting relationship helped both parties mobilize quickly.
- The Memorandum of Understanding (MOU) developed under this plan is a well-designed and well-developed document that lends itself for adaption by other agencies with similar needs. Having a facilitated dialogue between agencies, facility owners/operators and response partners during its development was one of the critical success factors.

2. Lessons Learned

- Especially when there is likely to be a good deal of resistance to change, it is highly beneficial to find planning models that have worked well in other jurisdictions and lend themselves to easy modification to meet local needs.
- The MOU used in this plan has been used with hospitals in other jurisdictions. This was, one of the factors that made it easier for local hospitals to support adoption. Currently 63

- nursing homes exist in the Region and work to get the remaining ones on board continues. The MOU is re-signed annually which is one of the mechanisms designed to support sustainability and buy in.
- Because the Puget Sound Region has yet to experience a truly catastrophic event; regardless of how well intentioned, it is difficult for planners, managers and elected officials to envision the chaos when a true catastrophe hits and to plan appropriately for an event of that nature.

3. Other Comments

This plan and planning process can be readily adapted by other jurisdictions. The
consulting team has successfully used this same methodology with a number of other
agencies/jurisdictions.

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E. Regional Resource Management and Logistics Plan

The purpose of the Puget Sound Regional Resource Management and Logistics Plan is to ensure that equipment, personnel and life sustaining commodities are available in adequate supply and speedily dispatched to areas of need in spite of transportation infrastructure damage. The Plan presents a strategy that encourages resource sharing and optimizes resource acquisition, allocation and deployment through increased communication, collaboration and standardization.

"Logistics, if it was easy it would be called taxes."

-IAEM Conference

The plan recommends strategies and best practices for improving resource and logistics management in the Region. The recommendations are based on a gap analysis completed at the beginning of the project and subsequent research on best practices to fill those gaps. Timeframes are presented for carrying out the suggested activities.

1. Best Practices

- This project was a model for stakeholder coordination and involvement. Leadership and stakeholder members were selected and supported to ensure active participation in plan development. Face-to-face on site meetings were conducted to produce the gap analysis, to develop the planning concepts and finally to review and help resolve policy issues.
- As with a number of the projects, there was a conscious attempt to identify and develop tools that jurisdictions could use during other emergencies, something of a scale less than a major catastrophe. To support that end, the plan identifies best practices for local jurisdictions that want to improve their disaster resource management capabilities so that they can be prepared to participate in regional catastrophic resource management activities.
- An independent project manager with specific project management expertise was hired to manage the work of the consulting teams. This enabled the Project Lead to focus on relationship management issues with stakeholders, to manage content, to provide overall quality assurance and to continue her existing workload.
- The consulting team selected for content related activities was doing comparable work for other jurisdictions concurrent to this project. This greatly accelerated the development process and helped maximize the consultants' value.
- Guidance for establishing and managing local staging areas and commodity distribution
 points is provided in the plan. It includes site selection criteria, site layout recommendations
 and equipment needs. It also describes how to organize and operate a collocated
 local/state staging area. Other jurisdictions may be able to leverage this work.
- A self-assessment tool allows local jurisdictions to evaluate their resource management and logistics programs against national standards established by FEMA Gap Analysis Guidance, Logistical Capability Assessment tool, the Emergency Management Accreditation Program and NFPA 1600. It is intended to help jurisdictions identify areas for improvement and to ensure they can interface with State logistics systems and processes.

2. Lessons Learned

- The Project Lead established an early and close working relationship with State Emergency Management staff that has preexisting roles in logistics management. The philosophy was to enhance existing State capabilities rather than try to change something that was already in place.
- Not all jurisdictions in the Region currently inventory their resources nor are there statewide standards for how to do so and the inventories that are maintained vary in terms of level of sophistication and detail. There is no central technology platform or standard software in use that facilitates information sharing about owned resources between jurisdictions or with the State. As a result, local jurisdictions do not have information about what resources might be available to them, either from mutual aid partners, other neighbors or the State. This is one of the gaps that will need to be filled in follow-on activities.

In addition, a process for requesting resources needs to be established. In the eight county region, there is no standard process or central system for jurisdictions to request resources from one another.

It was often easiest to work with the medium sized jurisdictions (e.g. Kitsap and Thurston Counties). They often times had staff who could provide input to the project and there was a manageable number of people to coordinate with so relationship management did not become as big an issue as it was with larger jurisdictions with more agencies and personnel.

3. Other Comments

- This is a well designed and well thought out planning document. A good deal of forethought went into identifying important next steps in the planning process. This document describes both long-term (three to five years) and short-term (one to two years) best practices and strategies that address the resource and logistics challenges in the Region.
- This plan includes two time-phased logistics deployment models; one for a no-notice event and the other for threats with advanced notice. The models outline tasks and actions to be completed by local, State and federal agencies from the onset of the incident through demobilization.
- One of the critical success factors for this project was early and regular involvement of State emergency management staff. The participation of the State was not as well defined or active in some of the other projects.
- While some of the other project leads mentioned it was difficult to establish working relationships with the remote counties (i.e. Mason and Island), Thurston (Lead county for Resource Management and Logistics Plan) and Mason Counties already work together as members of Homeland Security Region 3 so there was a preexisting relationship to build on. In addition, because they are medium sized, adjacent counties there is more immediate recognition that if Mason County was not involved in the planning process and a true disaster occurred, Thurston County would potentially suffer the consequences.

4. Regional Contact Information

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F. Structural Collapse and Rescue Annex

The Regional Structural Collapse Rescue Annex is a comprehensive plan that will facilitate an effective response to structural collapse incidents. The project team worked to involve as many regional stakeholders as possible in the planning effort including, but not limited to, State and local first responders in fire and law enforcement, emergency management, emergency medical services, public works and private sector firms with construction and demolition equipment and experience.



The project team also worked with regional stakeholders to integrate planning efforts into normal day-to-day operations to develop relationships and planning networks to improve disaster preparedness and resiliency in the Puget Sound Region. The ultimate goal was not just to develop another disaster plan, but to build a region that is better prepared for potential catastrophic response and recovery operations as well as for day-to-day emergencies.

1. Best Practice

- Washington State is signatory to the Pacific NW Emergency Management Arrangement (PNEMA) along with the States of Alaska, Idaho and Oregon; the Province of British Columbia; and the Yukon Territory. This agreement allows for the sharing of emergency resources across jurisdictional and international borders. The arrangement is applicable to search and rescue, as well as other needs, such as resource and donation management, medical response, damage assessment, debris clearance and other emergency functions. Under PNEMA, an emergency declaration by the governor is not needed and jurisdictions do not have to respond. Especially for states bordering with Canada, the development of an agreement like this may be highly desirable. When Katrina struck, Canada was one of the first jurisdictions to lend assistance.
- Consulting resources often play an important role in planning projects. One of the keys to
 the success of this particular project was the use of a consultant who had extensive local
 knowledge and credibility; was a true subject matter expert in the discipline; and possessed
 good facilitation, communication and project management skills.
- The role of private sector agencies is often important in emergency management plans. This Annex presents a model memorandum of understanding (MOU) for use with the Associated General Contractors of Washington. The draft MOU creates a general framework which provides the following:
 - ✓ Standardized training for improved coordination between fire service agencies and the construction industry and skilled trades requested to respond to such disasters,
 - ✓ The establishment of standard equipment and material inventories that may be useful in responding to disasters, and
 - ✓ The creation of a general framework for providing mutual aid between the agencies executing the agreement which may be called upon to respond to a disaster.
- The Washington State Fire Mobilization Plan has been a good model for inter-jurisdictional cooperation. It has been used enough so that participants are comfortable with it. The

availability of a statewide tool to support resource allocation, liability protection and reimbursement provides the freedom to both build and deploy structural collapse and rescue capabilities when needed.

The Associated General Contractors has offered to be the 24/7 contact for initiating planning and training efforts and mobilizing private sector equipment, expertise and supplies during response. Other jurisdictions may want to leverage the MOU that has been developed for use with the AGC as they are an important resource.

Using a trade association like the AGC is a best practice. It allows for one single coordination point for many different building trades which can be an issue for multiple emergency management agencies trying to access private contractor resources and expertise.

2. Lessons Learned

- Using existing stakeholder groups (in this case Fire Chiefs' Associations) was a good way
 to accelerate the preliminary review process. Tapping into existing effective working
 relationships eliminated the need to develop new ones.
- Planning processes like this large scale regional planning process take time even under ideal conditions. Trying to push issues through to resolution hinders relationships and progress.
- Structural collapse rescue resources are not uniformly typed in Washington State.
 Departments that have typed their resources base it on typing standards from other states, such as Florida or California. The project team developed a comprehensive set of recommendations for Squad and Task Force, Equipment and Heavy Equipment typing to address this shortcoming.

3. Other Comments

This document fills a planning guidance void that other jurisdictions may want to leverage.
 Much of it can be readily adapted to meet others' needs.

4. Regional Contact Information

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G. Transportation Recovery Annex

The objectives of this planning process were to assess vulnerabilities to transportation networks; to identify short-term solutions to likely system disruptions; to establish mid-term multimodal transportation alternatives to include road, rail, air and marine assets; and to consider long-term options using air, maritime and other transportation assets to support economic recovery.

The planning process established criteria for regional priority setting to improve the Region's ability to recover from a catastrophic event and is integrating these efforts with other regional catastrophic planning initiatives. The planning team also

"Without infrastructure to quickly and safely move goods and people, our economy and our traffic will stop dead in its tracks."

Former California Governor Arnold Schwarzenegger

worked to coordinate the activities of the many transportation stakeholders at all levels of government and the private sector throughout the Puget Sound Region to build relationships and planning networks and to build community capacity to improve disaster preparedness and resiliency.

Although this Annex specifically addresses transportation recovery after a major earthquake, the principles apply to all types of transportation disruption, especially those that require multiagency/jurisdiction and multi-modal coordination.

This Annex also provides information, strategies and guidance for local jurisdictions to develop their respective local implementation plans to address local issues and procedures for connecting local transportation recovery measures with the restoration of the regional transportation network, as well as establishing coordination linkages with other local jurisdictions, State and federal transportation agencies, traffic management systems and the private sector.

1. Best Practices

- This Region has yet to deal with a truly catastrophic event. A key design decision was to make the overall plan and its supporting documents useful for smaller scale incidents and everyday operations. The goal is to provide an annex that can be used at every opportunity in disaster planning, training, drills and exercises to ensure that emergency management and transportation agencies and other stakeholders are familiar with its contents and apply its resources to meet their needs.
- The Public Works Emergency Response Mutual Aid Agreement administered by the Washington State Department of Transporation provides an administrative mechanism for immediate response contingent on other agencies having the necessary resources and expertise. All eight counties within the Puget Sound Region are signatory to this agreement. This multi-jurisdictional MAA is a best practice that enables agencies to request assistance from peers in other departments or jurisdictions on an as-needed basis in a disaster/emergency. One of the project goals is to leverage this agreement in other sectors within the Region (e.g. ports where no mechanism like this currently exists.)
- Social media tools can be important resources for all levels to government. Washington
 State Department of Transportation (WSDOT) for example, uses Twitter to provide real time

information on traffic flow related issues. This and their traffic flow maps are extensively used by the general public, VOADS and the private sector (e.g. truckers). One of the overall goals is to take advantage of the increasing popularity and portability of these tools in the future for daily operations as well as other facets of emergency management.

- Maritime stakeholders in the Puget Sound Region, e.g., United States Coast Guard (USCG), Ports, Washington State Ferries, Department of Ecology, labor, private companies (tugs, shippers, barges, salvage and ferries), etc. meet regularly in committees to discuss maritime safety and security issues for both routine operations and for disaster response and recovery. The frequent meetings and coordination among stakeholders creates relationships that will be utilized for response and recovery after a catastrophic incident.
- The Puget Sound Regional Council (PSRC) has representatives from King, Pierce, Snohomish and Kitsap Counties as well as representatives from cities, towns, Tribes, ports, and transit agencies in that sub region. PSRC works with local government, business and citizens to build a common vision for the Region's future, expressed through three connected major activities: VISION 2040, the Region's growth strategy; Transportation 2040, the Region's long-range transportation plan; and Prosperity Partnership, which develops and advances the Region's economic strategy. The PSRC is currently spearheading an effort to coordinate traffic operations in the central Puget Sound Region. Summarized in the document, *Regional Concept of Transportation Operations: Best Practices (July 2009)*, this effort is based on similar work in California, Arizona, Oregon and elsewhere. The report identified key issues to be resolved for day-to-day operations as follows:
 - ✓ Define roles and responsibilities of participating agencies,
 - ✓ Establish a plan for developing, implementing and maintaining signal plans,
 - ✓ Identify a technical strategy for implementing cross-jurisdictional coordination,
 - ✓ Establish the physical infrastructure required to support the program, and
 - ✓ Integrate with regional long-range planning efforts and continually "keep an eye on the ball" towards implementing regional operational concept over the long term.

Implementing coordinated transportation policy is essential for transportation recovery. The issues involved with normal day-to-day operations are similar to those in an emergency and the work done by the PSRC provides an excellent starting point to extend this concept to the entire eight county Puget Sound Region and to expand this concept to include emergency operations and emergency transportation policy.

2. Lessons Learned

- So many jurisdictions are involved in transportation planning and operations that communications was often a key issue for the project team. While the planning team tried to take advantage of some of the existing meetings to gather and exchange information, they often established separate meetings as well. In retrospect, fully leveraging existing meetings would have been a better strategy.
- The majority of current regional transportation planning is focused primarily on emergency response. While emergency management agencies have developed relationships with transportation agencies, they are primarily with transportation operations staff rather than with those responsible for the types of capital design and construction projects required to

- recover from a catastrophic incident. When the emergency period is over, and the focus of effort moves to recovery, transportation expertise is more often provided by planners and engineers who, in larger departments, are not involved in day-to-day transportation operations nor in initial disaster response operations.
- After a catastrophe, some transportation recovery issues, such as traffic management strategies and situational awareness, from a span-of-control standpoint, may be better coordinated on a regional level. In a catastrophe, the volume of information and coordination needs may be best managed by establishing regional coordination structures.
- Interagency coordination on transportation recovery issues is fragmented and incomplete. State and local emergency management agencies should develop a forum among transportation stakeholders, including Metropolitan Planning Organizations (MPOs), Regional Transportation Planning Organizations (RTPOs), local and State transportation agencies and the private sector for the purpose of developing regional transportation recovery policies.
- The Regional Transportation Recovery Annex addresses transportation disruptions and short, mid and long-term solutions and options from a regional perspective. Stakeholders and the project team identified 50 major disruption situations and developed regional alternative routes and solutions. Most of the regional roadway transportation network is under the direction and control of State government. Waterways, airways and railways are under the direction and control of a mix of local, State, federal and private sector stakeholders. Few local implementation plans exist for specific potential disruptions to the regional transportation network. Addressing those voids is a very important piece of follow on work.
- Detailed recovery plans exist for major transportation system disruptions, such as those
 involving the Alaskan Way Viaduct, the SR 520 Bridge and for potential closures of
 Interstate 5 in the Olympia/Thurston County area. Similar planning at local levels for other
 key pieces of the transportation infrastructure is needed, especially for long-term outages.
- Each mode of transportation (roadway, waterways, airways and railways) has many private sector transportation stakeholders. Like the public sector, the private sector can support emergency recovery efforts consistent with the National Incident Management System and the National Response Framework. Private sector facilities, primarily intended to provide a locally-based function, could integrate with transportation recovery efforts at local government levels as appropriate. Private sector facilities intended to provide a regional or multi-county function could integrate with transportation recovery efforts at the state level. Formalizing public-private partnerships would also enhance coordination among participants.
- Many jurisdictions have identified marginal or inadequate structures (e.g., bridges that create traffic bottlenecks, bridges that are old or will need to be replaced in an earthquake, the addition of bike lanes or high occupancy vehicle lanes on bridges, etc.) that may need future improvements or additional capacity. In an effort to expedite recovery, local jurisdictions could prepare design/build requests for proposals (RFPs) that can be issued quickly after a major disaster for structures that may need replacement. Preplanning can shorten the recovery time and make it easier to take advantage of other incident specific supplemental funding opportunities.

- State and local agencies within the Puget Sound Region have bridges they own, maintain and/or inspect. Local agencies either inspect their own bridges or have contracts with other agencies for required bridge inspections. After a catastrophic incident, such as an earthquake, resources may be overwhelmed, and inspection of bridges may need to be completed by trained first response teams (e.g., those comprising transportation maintenance personnel) as opposed to bridge engineers.
- Some Puget Sound regional airports have damage assessment reporting procedures. After a catastrophic incident, the status of airports will be critical in providing emergency supplies for both short term and long term recovery. The State (WSDOT Aviation Division) is currently developing a status/damage report for airport sponsors (i.e., person or entity primarily responsible for airport operations), developing a query and report format, and creating access for outside agencies to view reports in the WSDOT Aviation Airport Information Database (such as FAA and State EOC).
- Transit agencies proved to have a great deal of information that can support a wide range of transportation and response needs and it would have been good if they could have been involved early in the planning process. One of the beneficial consequences of this planning process has been transit agency willingness to identify a single point of contact that emergency management staff can use in an incident.
- Social media tools can make it easier for consumers to access the information they need.
 Right now there are potentially duplicative efforts within the State and Region that can lead to confusion and inefficient use of resources.

3. Other Comments

- Transportation is a key critical infrastructure that needs to be a high priority for being restored immediately following a disaster. It is also vital for long-term economic recovery.
- This is a very comprehensive, well-designed, and well-developed planning document. Other jurisdictions may be able to adapt major portions of it to support their local and regional planning needs.

4. Regional Contact Information

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H. Victim Information and Family Assistance Annex

During a catastrophic disaster, one of the most significant challenges the Puget Sound Region will face is coordinating timely, accurate patient and victim status information and providing assistance to families of the injured and deceased. Family Assistance Centers (FAC) serve an integral function in supporting the loved ones of casualties and assisting responders in identifying patients and victims during a mass casualty or mass fatality incident. As such, they are a critical component of regional response to these events.



This annex developed a framework to facilitate regional coordination on situational awareness to identify the need to activate a Family Assistance Center. This includes:

- Key essential elements of information necessary to determine when a FAC is needed following a catastrophic incident,
- A regional structure for coordination to determine the need for a FAC, and
- Tools to support the planning and implementation of a FAC including:
 - ✓ A concept of operations template for a FAC,
 - ✓ Standardized tools to collect missing persons information during a disaster,
 - ✓ Standardized data elements for patient tracking information, and
 - ✓ Guidelines for hospital family assistance operations and coordination with an FAC.

1. Best Practices

- The Patient Tracking Steering Committee, specifically how it was constituted and managed, was a best practice. Key stakeholders were involved from the outset and their input actively sought and used during the project lifecycle.
- The tools developed have been based on the integration of lessons learned from previous mass fatality incidents and expertise from local and national subject matter experts.
- It is good to find other established, credible stakeholder groups who can help support the planning process. Members of the federal Disaster Mortuary Operations Response Team were instrumental in helping to validate issues and strategies and identify national subject matter experts to support the planning process.
- When used appropriately, FEMA technical assistance can play a valuable role in plan development as well as the planning process. A patient tracking workshop supported by national subject matter experts drew 110 participants from 75 agencies and provided a real boost to the development of the multidisciplinary steering committee, one of the project's critical success factors, and a jump start on the planning process.

2. Lessons Learned

Victim Information/Family Assistance is one of the functions where a great deal of data has
to be collected and managed centrally for the program to be effective. One of the major

- concerns is that it may not operate optimally across the full eight counties in our planning region unless a centralized FAC or centralized data sharing process is established.
- In a catastrophic incident, the State will need to be prepared to provide support for FAC operations if the local jurisdictions are overwhelmed or incapable of leading operations.
 However the State does not currently have the independent capability to establish an FAC.
- The eight county RCPGP planning structure has been very beneficial at bringing together jurisdictions and disciplines that previously had limited contact with one another and there have clearly been benefits with that. It is also different from other regional planning groups. More dialogue is needed to determine if the eight county alignment is optimal for this area.
- It is good to draw upon the experiences of other jurisdictions wherever possible. The Katrina and Haiti disasters provided good mass fatality incident models that helped the planning team understand the roles and importance of a central call center and Family Assistance Center operation and the core functions, backend systems (e.g. databases, inventory management and logistical support systems) and data elements required to support it.
- External agencies (State emergency management (EMD) and FEMA in this case) can be trusted allies and help advocate for project needs. EMD helped facilitate contacts and issue resolution with the Department of Health and other state partners.

3. Other Comments

 This plan contains a number of well-developed checklists, guidelines, model staffing plans/position descriptions, a Family Resource Packet, forms and worksheets that lend themselves for leveraging by other jurisdictions.

4. Regional Contact Information

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I. Volunteer and Donations Management Toolkit

The Regional Volunteer and Donations Management Toolkit provides assistance to participating agencies to help manage the coordination of high numbers of spontaneous volunteers and donations that will arrive in the aftermath of a catastrophic disaster. This toolkit supports regional coordination by providing local jurisdictions with a template for spontaneous volunteer management and another for volunteer reception center standard operating procedures. It also outlines roles and responsibilities for a recommended committee that would oversee and support local volunteer and donations management activities. In addition, this toolkit describes how vendor products can be used to manage and coordinate donated materials and cash.

"Altruism happens in post disaster environments."

Barb Graff, City of Seattle Director of Emergency Management

The Volunteer Management portion of this toolkit addresses spontaneous volunteers who would most likely be working with non-governmental and private agencies. The toolkit supports a tiered response to managing spontaneous volunteers, with "Level A" being a smaller disaster with only a few volunteers and "Level C" being a catastrophic event with volunteers arriving from all over the world. Toolkit users are referred to the Washington State Emergency Worker program's provisions for spontaneous volunteers who support government functions. Processes involving these workers are generally covered in individual agency emergency operations plans.

The Donations Management toolkit complements Emergency Support Function 7 (Resource Support) of the Washington State Comprehensive Emergency Management Plan (CEMP). Consistent with the State CEMP, the toolkit suggests the use of a vendor product to support donations management. Local jurisdictions that choose to use these templates will be offered training and an opportunity to evaluate them during exercises.

1. Best Practices

- A formal best practices review was conducted and then a gap analysis between current conditions and the goal state identified areas for improvement. From a planning perspective, this is a best practice.
- The Spontaneous Volunteer Management Template and a Volunteer Reception Center Standard Operating Procedure developed through this planning process have been adopted by Washington State Emergency Management Division for use statewide.

2. Lessons Learned

There needs to be a more formalized and consistent volunteer and donations management structure in Washington State. There is currently no statewide or regional entity that manages or oversees all volunteer and donations activities. Washington Volunteer Organizations Active in Disaster (WAVOAD) is a good central point of contact for coordinating volunteer organization efforts, finding out if volunteers are needed and linking volunteers with an affiliated volunteer organization. Each county, city, Tribe, jurisdiction and volunteer organization manages these activities in a different way; without leadership and guidance in support of a unified Washington State mission for volunteer and donations management, a regional plan will continue to have a large gap.

- The Puget Sound RCPGP needs a more coordinated public information and media messaging process supporting volunteerism and donating. Given the Puget Sound's infrequent experience with multi-county non-flooding disasters, Public Information Officers have not had the opportunity to develop relationships or procedures that cross agency boundaries. In a catastrophic disaster there is a critical need to have common and consistent messaging to the public regarding where and how to help the disaster-stricken communities.
- There needs to be continued spontaneous volunteer and unsolicited donations management planning across Washington State. In the Puget Sound Region, catastrophic disasters and the resulting spontaneous volunteer and unsolicited donations are new concepts. Continuing to spend more time on this planning effort in the future will enhance our readiness when the time comes that we have to face a true catastrophe.

The two concepts of volunteer management and donations management are very different. With the time allotted for this grant there was a heavy emphasis on filling the largest gap for spontaneous volunteer management, resulting in leaving a gap in planning for unsolicited donations management. More time and planning effort needs to be dedicated to this topic.

3. Regional Contact Information

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III. Other Meritorious Projects and Activities

A. Northwest Tribal Emergency Management Council

The Northwest Tribal Emergency Management Council (NWTEMC) is a 501(c)(3) non-profit organization that was initially formed in 2004 as a consortium of eight Tribes in the north Puget Sound Region of Washington State (Homeland Security Region 1) to help these Tribes participate more effectively in homeland security and emergency management preparedness efforts. When the Department of Homeland Security was initially formed, Tribes were defined



as local governments and were mandated to receive federal funding through the lead counties of the nine Washington homeland security regions they were located within. In most cases, this was the first real engagement that had occurred between the Tribes and their local emergency management agencies and it did not effectively help Tribes prepare for disaster events or receive funding to do so.

The Tribes in Homeland Security Region 1 formed the NWTEMC to help ensure that homeland security funding was distributed more equitably and that Tribes were engaged as partners in the preparedness efforts. Due to the success of this model in Region 1, other Tribes became interested and wanted to join the Council. Currently the NWTEMC is composed of and serves 25 Tribes in Washington, Oregon and Idaho for the purposes of information sharing and solidarity in dealing with homeland security/emergency management/public health issues as they pertain to Native-American Tribes.

Prior to the formation of the NWTEMC, Tribes would often only be on a distribution list for information on various emergency management planning activities, but quite frequently these contacts were outdated or were only to the Tribal Chairperson and thus did not make it to the appropriate person within the Tribe in a timely manner. Tribes were rarely able to effectively participate as they did not have a good venue to get together and brainstorm their ideas and needs in preparation for any regional discussions. This placed them at a distinct disadvantage when competing for resources or otherwise getting their needs addressed. While Tribes do not always work together on other issues, public safety and emergency management are areas where they have been able to find common ground in the past.

1. Best Practices

- From the outset, the NWTEMC has been focused on meeting the needs and addressing the issues of the Tribal Nations as a whole, not individual Tribes. This helped establish and maintain credibility with current as well as potential new member Tribes.
- The NWTEMC utilized other successful Tribal consortia to model their organization, such as the Northwest Portland Area Indian Health Board, Northwest Indian Fisheries Commission, and the National Congress of American Indians. Patterning a structure that was trusted and effective helped promote confidence in a new organization.
- Rather than attempt to become another planning overlay in an already layered process, the NWTEMC attempts to serve as a conduit so that the best Tribal representatives can be involved in the various regional planning activities on an as-needed basis.

- After the NWTEMC established its initial credibility and effectiveness, it expanded significantly. To support this expansion and to maintain itself as a transparent, non-partisan organization not beholden to any one Tribe's interests, a non-profit corporation was formed. This also allowed it to seek funding opportunities that may not be available if located as a program within a Tribal governmental organization.
- The NWTEMC maintains a robust Web site (nwtemc.org) and was an early proponent of utilizing social media (Facebook and Twitter). Given the scarcity of staff resources (only two people), these are significant accomplishments and have been critical to the Council's effectiveness.

2. Lessons Learned

- It is important to have strong, committed, charismatic leadership when attempting to start up a new organization in an environment where strong trust and effective working relationships have yet to be developed.
- State and local government often do not have a good understanding of how Tribal governments work. It would be beneficial for all parties if local government staff worked directly with local Tribal representatives more closely and more regularly. For example, Snohomish County Department of Emergency Management has developed interlocal agreements with both the Tulalip and Stillaguamish Tribes.
- From the Tribes' perspective, having an effective governance structure has made it easier for them to participate with local governments and find a common ground.
- An additional benefit to local communities from this more cooperative relationship is access to additional Tribal and federal resources. When a disaster strikes, this access can help quickly cut through otherwise bureaucratic and time-consuming processes which makes that community, Tribal and non-Tribal, more resilient.

3. Other Comments

 Because of their success in the Pacific Northwest Region, the NWTEMC is developing a national Tribal council using the FEMA Region boundaries as its template.

4. Regional Contact Information

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B. Northwest Warning, Alert, and Response Network (NW WARN)

NW WARN is a collaborative effort between government and private sector partners within western North American states, provinces, and territories (Alaska, Idaho, Montana, Oregon, Washington; Saskatchewan, Alberta, British Columbia; and Northwest Territories and Yukon Territory) which aims to maximize real-time, two-way sharing of situational information without delay and provide immediate distribution of critical information to those members who need to act on it. NW WARN has a seven-year history of building local relationships and trust.

NW WARN connects critical infrastructures from the public and private sectors, providing rapid two-way information sharing through multiple, interoperable communications methods. The system allows members in law enforcement, public safety, security and infrastructure protection across all sectors to rapidly share information. Both the public and members-only websites are available for information sharing, and system-wide notification is easy to deploy. Participants have access to points of contact through the database and can share information to provide situational awareness. NW WARN utilizes the MyStateUSA communication platform. The system has a robust capability, fully adaptable to the changing emergency communication environment and internally modifiable for quick and easy customization.

"Assessing, developing, attaining and sustaining needed emergency preparedness, response and recovery capabilities is a difficult task that requires sustained leadership [and] the coordinated efforts of many stakeholders from a variety of first responder disciplines, levels of government and nongovernmental entities. There is a no silver bullet, no easy formula."

William Jenkins, former United States Congressman

NW WARN has recently partnered with the Washington State Fusion Center (WSFC) to become the Critical Infrastructure component of the WA Fusion System, and has over 2,000 members from Critical Infrastructure/Key Resources (CI/KR), non-governmental organizations, non-profits and public businesses across the Region.

The WSFC's mission is to support the public safety and homeland security missions of federal, State, local, and Tribal agencies and private sector entities by serving as the State's single fusion center; detecting, deterring and preventing terrorist attacks; detecting, deterring and preventing significant criminal activity; performing threat assessment and information management services, including supporting the protection of CI/KR; and providing support to all hazards preparation, planning, response and recovery efforts. Active participants in the WSFC include Washington State Patrol, Seattle Police Department, King County Sheriff's Office, Washington National Guard and U.S. Department of Homeland Security (DHS) Office of Intelligence and Analysis, Immigration and Customs Enforcement and Transportation Security Administration.

1. Best Practices

Strong, highly engaged leadership is the cornerstone of most successful initiatives. In this
case it was the partnership between Matt Morrison, Chief Executive Officer of the Pacific

NorthWest Economic Region² (pnwer.org) and Scott Crabtree former Assistant Special Agent in Charge of the Seattle FBI Office. After the World Trade Organization riots in Seattle in 1999, it became apparent to both that better tools were needed to get information on major incidents out to critical infrastructure owners, most often in the private sector.

- In addition to being highly engaged, both leaders were highly credible, another important consideration for getting stakeholder involvement and buy in.
- While there was significant support and participation by the FBI, they did not try to dictate to the larger group what the outcomes would be. Their continued involvement over the years led to the strong partnership that continued even after Scott Crabtree rotated out of the Region. His successors maintained the philosophy of cooperation after he left.
- Broad business and government stakeholder involvement was used to brainstorm needs and solutions. Over 200 individuals representing very diverse agencies and businesses initially participated. Multiple sessions were held and new participants encouraged to join to help gain the broadest perspective.
- Especially when limited resources are available, it is vital to have key staff involved from inception, through development and on into production. Without such continuity, there is a greater likelihood of mistakes and miscues that can quickly undermine credibility and erode confidence.
- NW WARN has developed robust communications capabilities. They have the capacity to generate 3,000+ outbound calls per minute; 1,000,000 e-mails per hour; 3,000 text messages/pages per minute; 3,000 faxes per minute; and provide immediate secure website updates.
- NW WARN members are rigorously vetted to ensure that access is provided only to those
 who truly have a need to know. This is critical for maintaining confidence within the public
 safety and intelligence communities.
- The NW WARN system allows members in law enforcement, public safety, security and infrastructure protection across all sectors to rapidly share information. The public webpage is helpful for anyone wanting to report suspicious activity to the Washington State Fusion Center and also provides information and updated reports concerning emergency management and preparedness planning. The members-only webpage provides additional member-only information and is available for information sharing. System-wide notifications to members take only one step.

2. Lessons Learned

 PNWER's long experience in working with the business and government leaders in all the northwest states and Canadian provinces was extremely valuable in understanding their

² Founded in 1991, PNWER is the only statutory, non-partisan, bi-national, public/private partnership in North America. PNWER is the forum for collaborative bi-national planning involving both the public and private sectors and offers leadership at the state/provincial level in Salem, Olympia, Boise, Helena, Juneau, Edmonton, Regina, Victoria, Yellowknife and Whitehorse, and at the national level in Washington, DC and Ottawa. PNWER facilitates working groups consisting of public and private leaders to address specific issues impacting the regional economy.

- needs and involving them in the NW WARN program's development process and their current membership in NW WARN.
- While it was very important to have broad participation in the initial brainstorming, it was equally important to distill the group down to the most vital stakeholders who represented a broad spectrum of government agencies and infrastructure businesses, and who were willing to spend significant time to ensure the program's development and success. This core group amounted to approximately 50 individuals and the eventual success of NW WARN was a result of their dedication and effective work.
- Senior or retired subject matter experts who still care and want to be involved can be recruited to assist in program development, operations and management. They are a readily available resource and can cut program costs if they are able to volunteer.
- One of the benefits the Pacific Northwest Region enjoys that other regions may not is a
 good history of public/private sector partnerships, especially in emergency management.
 This does not come overnight and takes years of hard work on the part of many committed
 individuals. These partnerships can be used for developing other programs that are
 mutually beneficial.
- Having the NW WARN office located within the Fusion Center operation helps keep operating costs to a minimum and makes it easier to more freely exchange information and ensure the communications needs of the Fusion Center and members are met. It is best if the main users and participants in any program or project remain in close, frequent contact in order for the program to evolve and continue to be of value.
- Private and public sector participants quickly saw the value of NW WARN, promoted it with their peers, which broadened the base for support, further enhanced credibility and resulted in providing the services to more infrastructure agencies and businesses throughout the Region.
- Relationship development and trust can pay big dividends over time. Through its
 partnership with the Washington State Fusion Center to become the Critical Infrastructure
 component of the WA Fusion System, NW WARN now has over 2,400 members from
 across the northwest region.

3. Regional Contact Information

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C. Pacific NorthWest Economic Region

The Pacific NorthWest Economic Region (PNWER) is a statutory non-profit organization created in 1991 by the states of Alaska, Washington, Oregon, Idaho, Montana; the Canadian provinces of British Columbia, Alberta, Saskatchewan; and the Yukon Territory and Northwest Territories. PNWER is the only statutory, non-partisan, bi-national, public/private partnership in North America. PNWER provides a forum for collaborative bi-national planning involving both the public and private sectors and offers leadership at the state/provincial level in Salem, Olympia, Boise, Helena, Juneau, Edmonton, Regina, Victoria, Yellowknife and Whitehorse, and at the national level in Washington, DC and Ottawa. PNWER's purpose is to collaborate and address issues that



impact the cross-border regional economy of the Pacific Northwest. To this end, PNWER has worked with stakeholders to develop multiple joint government and private sector initiatives to improve the disaster resiliency of the Pacific Northwest region.

1. Best Practices

- In order to establish a concerted effort at maintaining the public-private interface, the Center for Regional Disaster Resilience (CRDR) was created. With funding from a wide range of public and private sector sources, for over ten years the CRDR has brought together hundreds of public and private sector leaders in a series of infrastructure interdependencies exercises called Blue Cascades designed to make the Pacific Northwest Region more disaster resilient. The six Blue Cascades exercises have focused on critical infrastructure interdependencies and the cascading impacts of disasters on regional infrastructure and economy. Blue Cascades topics have ranged from cyber security, supply chain impacts, pandemic preparedness, terrorist attacks and natural disasters. One of the most valuable aspects of the Blue Cascades series is that all the exercises were developed by the stakeholders. The scenarios and format of the exercises were planned and developed with planning teams consisting of dozens of public and private sector stakeholders.
- The Blue Cascade Exercises themselves were excellent events, but PNWER took the next step to write after action reports and then developed action plans with input from stakeholders. These action plans have been integrated and PNWER tracks the progress of work over time. This action plan brought extra value to the stakeholders and further reinforced PNWER's commitment to regional solutions.
- Critical infrastructure interdependencies are not always obvious, even to the beneficiaries of
 the critical infrastructure. Therefore, the identification of critical infrastructure
 interdependencies has been a major focus of their work leading to the recognition of the
 complexity of this issue by federal agencies.
- As part of the partnership's collaborative activities, a cross sector regional information sharing system called Northwest Warning, Alert and Response Network (NWWARN) was established. Currently, more than 2,400 vetted public and private critical infrastructure stakeholders from across the Pacific Northwest are members of this system. It has now been integrated with the information sharing work of the Washington State Fusion Center.

- PNWER coordinates the Region's state and provincial and federal CIP managers on a regular basis as part of the CIP Task Force. PNWER facilitates quarterly calls with this group to share best practices, collaborate on projects and ensure relationships and trust are established between jurisdictions on CIP related activities.
- Canada's Ministry of Public Safety and Emergency Preparedness Canada and the US
 Department of Homeland Security have recognized PNWER for its leadership role in
 establishing a long-term effort at building public private partnerships around the issues of
 critical infrastructure vulnerabilities and interdependencies between these infrastructures.
- A comprehensive overview of stakeholder requirements has been developed over time based on hundreds of interviews, conference calls, meetings, and a survey with stakeholder-validated questions. These requirements function as a resource document that allows private sector critical infrastructures and governments at all levels to understand the complexity of our modern technological society and how the various systems interact with one another during various disaster scenarios.
- Research has been conducted regarding critical infrastructure information sharing practices, protocols, existing mechanisms, and other capabilities that could be leveraged in an operating environment. A comprehensive baseline inventory of existing federal, state, local, and private sector information sharing capabilities was developed. This could not have been done without the full cooperation of all parties. Understanding the current information sharing capabilities and channels allows governments and the private sector to find better ways to communicate with one another and to share information across infrastructure sectors and jurisdictions at the federal, state and local levels.

2. Lessons Learned

Persistence and disciplined management pay off. Many of the projects that PNWER has worked on have taken years to fully develop. At times national and federal interest in various projects has complicated and delayed progress. While lesser organizational efforts might have given up on the process because of potentially disruptive federal guidance, PNWER has remained persistent. Through it all they have "stayed the course" remaining organizationally resilient when others would have abandoned the effort. Larger efforts like the ones they have undertaken will likely take months and even years to be accomplished.

PNWER has assisted in bringing in many major federal initiatives to the Region based on stakeholder input and participation. These projects have greatly assisted in moving the Region to become more resilient.

One outcome from one Blue Cascades Exercise that focused on cyber security was a regional cyber incident management pilot developed by the City of Seattle and the University of Washington in cooperation with the Department of Homeland Security (DHS). This was the result of a lengthy effort at cyber security and an ongoing commitment by organizations and individuals committed to working on the issue of cyber security.

PNWER has represented the accomplishments of the partnership by the preparation of briefings for high-level DHS and Office of the Director of National Intelligence officials on the progress of multiple projects. This national attention has assisted in obtaining additional financial support for projects and new initiatives.

Rather than working only at the operational level, PNWER has continued to work with regional legislators on the importance of critical infrastructure interdependencies and cross-sector information sharing. Elevating the discussion of critical infrastructure to the policy level has brought a deeper understanding of the issues by legislators who make the laws and can influence their own governments to take a more holistic approach to critical infrastructure that crosses jurisdictional boundaries.

3. Other Comments

- PNWER is referenced in the National Infrastructure Protection Plan as a model for bringing the public and private sectors together to address critical infrastructure protection issues.
- PNWER events have remained very popular over time and regularly receive strong
 participant feedback on their value. This has helped underscore the ongoing need for
 venues that bring the public and private sectors together to discuss issues of common
 concern and then develop plans of action to jointly address these issues.
- PNWER is listed as a best practice for working with other states and provinces to address critical infrastructure security issues in the National Governors Association's "Governor's Guide to Homeland Security".

4. Regional Contact Information

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D. Partners in Emergency Preparedness

Back in the early 1990's, there were two different emergency management conferences being held annually in western Washington State. Each of the events drew attendees specific to their discipline and area of focus. One was centered around government and was called the State Director's Conference hosted by the Washington State Emergency Management Division. The focus of this event was on emergency management directors from city and county governments. The second conference focused on private sector business preparedness and continuity of operations and was started by the King County chapter of the American Red Cross working with a group of business representatives, consultants and local emergency managers. The group was called the Western Washington Emergency Network (WWEN). There was little to no crossfertilization between the public and private sectors and these two conferences.

In 1995, leaders from both the WWEN/American Red Cross and Washington State Emergency Management Division met to look at combining the two events in the future. The name for the new conference was designated as "Partners in Emergency Preparedness." This name was to reflect the fact that all segments of the community would be participating.

The Partners in Emergency Preparedness Conference was a big success from the start. The registration cost in the beginning was \$100 and all the labor to coordinate registrations and the conference agenda was donated or provided by government agencies and private sector volunteers. Registration costs went solely to direct costs associated with the meeting room and meal costs.

The conference was originally held in SeaTac and then later moved to Bellevue. Because of restrictions on the size of hotel conference facilities, the attendance was capped at 500 people for both venues. The conference has always been a two-day event with associated meetings of the Washington State Emergency Management Association (WSEMA) being held the day before the conference.

The conference size and complexity grew to the point that the effort required was too much for an all volunteer approach. The conference hired an event planning organization to assist with the conference. They worked for the Partners Conference until 2006 when Washington State University was hired to assume these responsibilities.

The conference venue was moved in 2007 to the Tacoma Convention Center. Due to its size, more people could be hosted with attendance now reaching approximately 700 people annually. The conference sessions are very diverse reflecting attendees' needs and desires. In 2011, 49 sessions were held touching on a wide range of communications; and private sector, non-profit and local government emergency management issues. The Keynote Speaker was Claire Bonilla, Senior Director of Business Continuity and Disaster Response from the Microsoft Corporation. This year's topic was: "Notes from the field: Collaboration, Commitment, and Capability application for long term impact in disaster response."

"Tweet Me Up: Social Media Tools & Crisis Management: This session examines the uses of social media, trends, and risks. It includes the benefits of new media for crisis management as well as the challenges, such as cybersecurity threats and reputational risks..."

From the 2011 Partners in Emergency Preparedness conference guide

A volunteer committee still administers the conference selecting the program elements and setting goals and objectives for the event. These volunteers continue to be drawn from both the public and private sectors.

1. Best Practices

- The Puget Sound Region of Western Washington has established a national reputation for the level of collaboration between governments and in engaging the private sector. The Partners in Emergency Preparedness Conference was one of the very first venues that began to bring people representing diverse interests together and helped break down barriers between disciplines and governments while improving the public-private sector communication.
- While the price for attending the conference has risen to \$325, it is a fraction of the cost for attending similar events being put on by commercial interests or travel costs to go to a similar event outside the northwest. The planning staff works hard to keep costs low making it easier for more attendees to participate.
- The conference scope and agenda are determined by an interdisciplinary committee comprised of public and private sector representatives. This helps ensure timely and relevant topics for the broadest possible audience. The conference committee has consistently put together engaging presentations and keynote speakers who are experts in their respective fields. The caliber of the conference rivals much more costly events.

2. Lessons Learned

- Numerous leadership changes on the conference committee have occurred over the years. The event is not driven by one strong personality and therefore has survived with excellent support and participation by multiple sets of private and public sector participants who invest the time and effort to make it a superior event.
- Bringing in event-management organizations to manage the logistics of the conference has allowed it to grow in size and still remain a volunteer led event.
- Moving to the Tacoma Convention Center opened up attendance to even larger events with more attendees. It is now the largest event of its type in the Pacific Northwest.
- Long term, multi-year opportunities to get together, learn together and share ideas together help in building the individual relationships that are so critical between individuals who represent their organizations when disasters strike. The networking made possible by the conference and the benefits from a diverse audience cannot be over stated.

3. Regional Contact

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E. Regional Public Information Network

The Regional Public Information Network (RPIN) was created to enhance interjurisdictional cooperation during incidents and emergencies and to explore new strategies for providing more effective, coordinated public information when significant disruptions occur. RPIN members include representatives from numerous government jurisdictions, agencies, non-profit groups and organizations that provide essential services to the public in the Puget Sound Region.



Shortly after its formation, RPIN embarked upon an unprecedented effort to create a multi-jurisdictional Web-based breaking news and alert system hosted on www.GOVLINK.org. This was an important breakthrough, given the numerous government agencies and organizations that deliver public services and information in the Region. In King County alone, there are 39 cities and 127 public organizations. Due to the complex geographic and political structure of the Region, interagency collaboration has historically been very difficult. Additionally, this is home to many federal agencies that have regional offices based in the Seattle area, making coordination even more complex.

Prior to creation of the RPIN Web site, the public, media and even other responding agencies had to rely solely on broadcast news reports, phone calls, faxes and many different agency Web sites to find out what was happening and how others were responding. The public had difficulty getting comprehensive information that might have been useful, or even lifesaving, depending on the incident. RPIN has expanded the Region's ability to deliver news across jurisdictional boundary lines to a broader regional audience more quickly and efficiently. Because many emergency service providers are also RPIN members and subscribers, they receive information in a timelier manner and have a more comprehensive understanding of the situation.

- Like many other innovations, RPIN's initial success was the result of strong executive support and highly credible business leader involvement along with cooperative efforts from emergency managers and public information officers representing multiple agencies.
- From its earliest days, RPIN was seen as a critical business system. To meet this need, King County staff overseeing the RPIN system integrated it into their own on-going 24/7 operations. The RPIN application has never been down except for brief periods for planned technical reasons. RPIN members were alerted to these disruptions and plans were made to post news manually, if needed. Geographic redundancy of the RPIN Web site has been provided through the City of Denver, which provides emergency hosting for the King County Web site should the site become incapacitated during a major event.
- The GOVLINK.org website is intergovernmental and is not tied to any one jurisdiction. This "agnostic approach" of having a governmental website that is not associated with a larger jurisdiction has provided a neutral place for the housing of the data and linking to citizens. Other regional disaster preparedness and response initiatives are also housed there.

- To promote relevancy and further increase value, RPIN members have been vigilant about exploring ways to enhance its use. During the National Level Exercise TOPOFF2, RPIN partners activated a Regional Joint Information Center to coordinate and disseminate information in response to a simulated terrorist attack, including exercising a mock version of the RPIN Web site. Over a two-and-a-half day period, agencies participating in TOPOFF2 posted more than 50 exercise news releases and status reports. The Web site received high marks from exercise evaluators and regional participants.
- RPIN spans three metropolitan counties in Western Washington that between them have half of the State's population. Citizens can sign-up to get e-mail or text messages sent to them for the entire metropolitan area or just their specific county, or in the case of King County either the north or south half.
- RPIN complies with the Section 508 of the Rehabilitation Act and is therefore completely accessible for residents with disabilities and special needs. RPIN alerts are available in accessible formats, such as e-mail and text message, for individuals who are deaf or hard of hearing. The Web site also includes specific provisions for individuals with vision impairments, such as large-print, different fonts, and screen reader navigation.
- RPIN does not moderate members' messages. Because organizations are able to control
 "their" message and identity, no agency is giving up its jurisdictional integrity. This is an
 important consideration in an environment where interjurisdictional trust is still being
 developed.

2. Lessons Learned

- There is an increasing use of social media for public information dissemination. The new social media tools, however, will not replace the need for RPIN. It is the one place where news and information is aggregated and it also provides a digital platform for PIO's from multiple jurisdictions to coordinate their messaging and resource needs with one another.
- RPIN's most important programmatic achievement has been the recognition by its partners
 that it is possible, and in fact necessary, to work cooperatively and collaboratively to
 effectively respond to disruptions and emergencies, despite the complex geographical and
 political nature of the Region.
- The more PRIN is used, the greater its value. RPIN partners can, through online forms, directly post headlines, news releases and send e-mail news alerts to a diverse audience in a more timely manner. The RPIN Web site can also serve as a back-up site, should partner Web sites become inoperable. This provides a direct business benefit to the participants at no additional cost.
- RPIN provides local and regional news media outlets access to a central source for emergency news and by receiving news via e-mail in a timelier manner than the traditional individual e-mailed attachments and faxes. Media representatives typically do not have the resources to contact all responding agencies during major events. By providing a central clearinghouse for information, the RPIN service significantly aids the media and ultimately the public receives more comprehensive and timely reports.
- Even though annual operating costs are minimal (typically less than \$20,000/year), funding
 has always been a problem, given the grassroots, decentralized nature of the program. For

the most part, King County and its partners have had to rely on whatever promotion each partner has been able to provide – namely exposure through their own Web sites and through the media during incidents and weather events to help market RPIN and keep it visible. While significant effort has been placed on working with the news media to publicize the program, broadcast and print media generally prefer to incorporate RPIN information into their own Web site to meet their own promotional objectives.

- RPIN partners have also come to recognize that what the media may not consider "newsworthy," given limited space or time, may be of great importance to many individuals and communities. The feedback King County has received through customer satisfaction surveys and e-mailed comments indicates citizens often find that the only place they can get detailed information (such as a full list of local impacts and road closures during a flood situation) is directly from the public agencies providing the service via RPIN.
- The Regional Public Information Network partnership can serve as an excellent model for any region of the country challenged with trying to coordinate public information from multiple agencies and organizations. But first, there must be a sincere desire and commitment to improve coordination, response and information-sharing between participants and the public during emergencies or other events. The key to success is commitment at the ground level toward developing strong coordination and active engagement by partners to achieve mutually agreed upon goals. The RPIN model also requires support by elected officials and management at all levels, given the interjurisdictional nature of such a program.

3. Regional Contact Information

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F. Washington State - Business Information Web Site

The Washington Emergency Management Division's (EMD) Business Outreach program was launched in June, 2007. Establishing a robust two-way information sharing system that would make real time response and recovery information easily accessible, something that did not exist at the time, was a high priority for business sector stakeholders. Initially the program utilized traditional e-mail distribution lists to support communications between the private sector and EMD, but this proved too limiting. Even though no dedicated funding was available to address this need, EMD's External Affairs Manager launched an initiative to review existing EMD information sharing systems to determine how they could be configured to meet the business sector's requirements.

...the leadership challenge in any crisis is often to strike the right balance between planning and improvisation"

Wharton Center for Leadership& Change Management

Launched in December, 2008, the Emergency Management Division's Business Information site provides businesses of all sizes information they need to make informed decisions about protection of their people and their assets. The portal leverages the use of EMD's Washington Disaster News web site that was already being used to share information with media and other public sector stakeholders. The Business Information site is not only extremely cost effective, but also allows for real time interaction as needed and has multiple formats to push information to mobile devices. The system also provides unique information tracking and reporting metrics that are not easily obtained via traditional e-mail systems.

- It is important to break down barriers around trust that often exist between business and government. Hiring an External Affairs Manager who was considered a private sector insider (over eight years with Washington Mutual and Microsoft in business continuity and crisis management roles) helped launch the State's Business Liaison Program faster. There was an increased level of buy in from the private sector from the start.
- Washington State has a comprehensive and well-developed process for methodically reviewing information technology investments. EMD's External Affairs Manager was able to review the private sector's requirements and determine if either one of the two systems owned by EMD met or could be retooled to meet those requirements. This accelerated the implementation schedule and kept costs to a bare minimum.
- Through focus group discussions and regular one-on-one communications, the business sector was actively involved in designing the new Business Information site. It was important that the system was designed from the start with the end user in mind. Private sector partners involved in the design phase of the project represented a wide spectrum of companies with many representing critical infrastructure.
- EMD annually conducts three to five major exercises and each of those is supported by two
 or three training sessions prior to the exercises. These help ensure that all state EOC
 business liaisons are familiar with all communication tools used within the EOC to support
 business communications.

- Robust communications capabilities are critical in emergency management. The Public Information and Emergency Response (PIER) system used by EMD offers a full suite of message distribution and communication capabilities including text messaging, voice mail and e-mail. In 2010, during the Gulf oil crisis both British Petroleum and the Coast Guard used a PIER system to manage inquiries from the public and the media. The website set up for that event received 150 million hits and 24 million e-mails were generated in response to inquiries related to the event.
- Formal business liaisons provided through the Association of Washington Business were added to the State Emergency Operations Center in 2007. They have been fully trained to operate in the EOC. Having trusted and credible business liaisons in place in the State EOC ensures two way information sharing occurs more quickly and freely. FEMA's Private Sector Office has consistently cited the use of the PIER system and the overall Washington State Business Liaison program as best practices.
- Once a system like PIER is used for response and recovery communications, it is easy to expand usage to share information in the preparedness and training phases before a disaster occurs. The Business Information site is currently being used to share all private sector information related to the Evergreen Quake Exercise Series 2012. Having this type of system in place allows EMD to be extremely resource efficient with communications at a time when government resources are shrinking.

2. Lessons Learned

- High performing organizations can be great partners. PIER was developed by a local company known for thinking outside the box. Their staff was willing to sit down and figure out a way to modify EMD's site in a way that would accommodate the private sector requirements. The company continues to excel in customer service with staff remaining very responsive to suggestions for improvement and system enhancement.
- Working with a company that understands the emerging trends in the communications field ensures a cutting edge communication strategy. PIER as a system is growing in popularity and is constantly battle tested through events such as the Gulf oil spill. As a result the system is modified constantly to ensure emerging information channels such as social media are integrated into the system for easy use.
- The Puget Sound area is historically plagued by winter storms. Implementation of the new system was aggressively scheduled to ensure it would be activated in time for the 2008 winter storm season. The rollout timeline proved to be timely as the winter of 2008-2009 resulted in a federal disaster declaration for multiple counties in the state and closed the I-5 and I-90 supply chain corridors for a period of time. The new system proved its worth as the real time communication capability allowed State EMD to keep businesses updated on roadway closures, where alternate routes were available, and provided other priority information that allowed critical supplies to keep circulating through the state. After action feedback from business stakeholders to the new system was extremely positive. This initial success was a real boost to the program's credibility.
- Having a system that is both intuitive as well as easy to use has made it easy for new users to quickly become proficient.

Feedback from the business sector overall on the use of the system to share information before, during and after disasters remains extremely positive. PIER allows Washington Emergency Management to be in immediate contact with over 7,000 Washington business organizations.

3. Regional Contact Information

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G. King County - Multi-Agency Mass Care Task Force

King County is vulnerable to the natural and human-caused disasters detailed in the King County Hazard Identification and Vulnerability Analysis (HIVA). In the last 25 years, damage to homes has been primarily due to severe flooding and other severe weather related incidents like windstorms. Landslides have impacted some homes in a significant way, especially from the winter storms of 1996 and 1997.

The scale of these disasters has been relatively small. However, the threat of a major Green River Valley flood³ as



well as the location of King County in a seismically active region of the nation, required the County to prepare for an incident that could cause major damage to homes and displacement of residents. In the event of a disaster of that magnitude, King County would be required to shelter more residents than it had an immediate capacity to serve.

The Mass Care Task Force helps King County meet an obligation to its residents by providing coordinated, strategic mass care operations. The Mass Care Task Force is a standing group that meets regularly and it will partner up with King County agencies to manage all mass care concerns for King County government. It is component of Emergency Support Function 6. When a city's capacity to respond is exceeded, then a request for County assistance is made. It is then that the Multi-Agency Mass Care Task Force provides the assistance and support to meet this need.

- Multi-agency coordination works best when all of the participating agencies are appropriately represented and actively participating. In the case of this Task Force, the individuals all had strong operational backgrounds from responding frequently to national and international disasters with mass care impacts greater than King County's likely exposure.
- High risk/high visibility projects often require strong executive-level leadership involvement. The County was fortunate to have the department head who is responsible for emergency management, and reports directly to the King County Executive, helping to oversee the work of the Task Force.

³ In January 2009, 15 inches of rainfall within 24 hours peaked water inflows behind the Howard A. Hanson dam reservoir at 30,500 cubic feet per second, raising the reservoir level to a record high of 1,189 feet above sea level. In comparison, the maximum authorized storage level is 1,206 feet above sea level. The Howard A. Hanson dam had controlled and prevented a flood that would have caused an estimated \$4 billion in damages.

However, soon after the flood the US Army Corp of Engineers (USACE) discovered two depressions on the right abutment of the dam, increased water levels in groundwater monitoring wells and the appearance of sediment-laden water entering the abutment drainage tunnel. The USACE did not believe the dam was at immediate risk of failing, but assessed the increased danger to downstream communities until the problem was resolved. The January storm and potential for mass flooding was one of the trigger events that led to the creation of the Mass Care Task Force.

- To help ensure against any false starts, the major agencies needed for a long-term solution were a part of the planning process from the outset:
 - ✓ King County ESF 6 Task Force Lead
 - ✓ American Red Cross Task Force Co-Lead
 - ✓ The Salvation Army
 - ✓ Northwest Baptist Convention
 - ✓ Washington State Animal Response Team
 - ✓ Washington Volunteer Organizations Active in Disaster
 - ✓ King County Office of Civil Rights
 - ✓ King County Department of Community Services
 - ✓ County ESF 7, 8 and 11 Leads
- Great care was taken in selecting third party reviewers and advisors. An eclectic group was assembled with representatives from stakeholders, subject matter experts, supporters and professional emergency management coordinators who helped ensure a comprehensive approach to decision making was taken. The group included Tribal representatives, Washington State and FEMA (ESF 6 Leads), as well as a member from the Gates Foundation Global Security.
- Even though the staff from the non-government organizations (NGO's) came from the local
 offices, all of the formal agreements are at the national level. This helps to ensure the
 County will have the required resources in the event of a disaster.
- Key leadership was provided from the Salvation Army, American Red Cross and the Northwest Baptist Convention. The representatives were all highly credible, solutionoriented individuals who helped the Task Force stay focused on its goals.

2. Lessons Learned

- The NGO's that participated in the Task Force helped strengthen the planning process and resulting documents. They brought fresh perspectives and helped drive the planning to a finer level of detail than existing County plans and advocated for the highest level of agency accountability.
- Even though very comprehensive solutions were developed, because multiple agencies were involved and accountability was focused at the agency level, emergency management staff who were used to a good deal of centralized control in prior plans were not always comfortable with the recommended approach. Having highly credible Task Force members helped ameliorate some of their concerns. Trust in your partners replaces the need for control.
- Having Task Force participants from the local, State, and federal levels provided some unique opportunities for local staff to develop a better understanding of federal limitations.
 Federal agencies did not necessarily avail themselves of this same opportunity to learn about local needs.
- No planning process is perfect. Local staff often grumble about the requirements of the National Response Framework and the National Incident Management System, but the standards imposed by these federal plans and the enabling legislation are what help to

- ensure agencies from different levels of government and different parts of the county can work together in a disaster.
- Trust needs to be expanded beyond the individuals responsible for the planning in order to have organizations work seamlessly during a disaster response. Multi-organizational training classes and exercises that involve the individuals who will be responsible for the response activities will help in building and expanding that trust between organizations.

3. Regional Contact Information

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H. Kitsap County - Damage Assessment Reporting

Kitsap County is located in the northwest portion of Washington State and is home to more than 240,000 residents. The County includes Kitsap Peninsula, several islands and has more than 200 miles of saltwater seashore. More than 30 percent of the 566 total square miles is made up of water. As a result, the lowlands of Kitsap County often face flooding during periods of heavy rain.

"You win not by chance, but by preparation."

Roger Maris, famous baseball player

The Kitsap County Department of Emergency Management (KCDEM) is responsible for meeting the emergency and disaster needs of the County and its four cities. The agency works with local government, cities, State and federal agencies and volunteer organizations to prepare for, respond to, recover from and mitigate any emergency or disaster that impact the County.

Like many public agencies, KCDEM has struggled to find the best way to efficiently deliver its essential services in the face of declining resources. Since Kitsap County regularly experiences severe flooding and resulting property damage, KCDEM has worked for approximately the last ten years to automate the damage assessment process where possible, eliminate potentially redundant data collection and reporting systems, and make it easier for residents and business owners to self-report damage through on-line tools embedded in KCDEM's home page.

- KCDEM works directly with all public and private agencies. One of the keys to their success with this project was ongoing involvement by all of the stakeholders. Stakeholders were actively encouraged to identify their needs and priorities and that input was used to guide initial development activities and future enhancements.
- The damage assessment methodologies for unincorporated Kitsap County are the same as those used in its cities. This promotes a consistent and holistic assessment of the overall damage and helps facilitate mutual aid.
- The system was developed by internal staff whose knowledge and credibility with stakeholders helped ensure buy-in as well as high quality products. Technical assistance was provided by a Kitsap County programmer making it easier to maintain the application into the future.
- Staff followed the "keep it simple" paradigm wherever possible. Damage assessment reporting is confined to one page and data is drawn from the Assessor's Situs File so property owners do not have to guess or do additional research to report the value of the damaged property.
- Once data is collected, it can quickly be exported to Excel spreadsheets that replaced two State forms (DEM 129 and 130) required for preliminary damage assessment reporting.
 This eliminates duplicative data entry.
- Within a few hours of an incident, data can also be exported to the county's GIS system to provide an easy to understand graphical depiction of the preliminary damage assessment.
- As damage assessment reporting has evolved over time, KCDEM is now to the point where the system is now essentially paperless. In 2010, mobile computer terminals were installed

- in all first response vehicles (fire, law etc.) and the forms for Damage Assessment are on each of the terminals. This not only improves efficiency, but also makes it possible to distribute information much faster than in the past. This helps target response, recovery and mitigation efforts.
- During a major disaster in Kitsap County, designated personnel can conduct a rapid assessment of life safety and facility damage during the first three hours (in the past it would take up to six to eight hours to gather all this data and start the transfer to the Washington State Emergency Management Division). In accordance with the city/county EOCs, personnel will be assigned to collect data received from the field, which will then be assessed and prioritized in support of response activities by emergency workers.

2. Other Comments

 This system is available to other agencies to adapt and use at very minimal cost. Some programmer time may be needed to modify reports and Web pages and interfaces.

3. Regional Contact Information

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I. Pierce County – Disaster Survivors' Advocacy Team

A huge rainstorm pummeled the Pacific Northwest in January, 2009, causing major flooding of rivers and surrounding areas, including in Pierce County, Washington. People and their pets evacuated to shelters and other places on higher ground to escape the rising waters. Many residents suffered significant losses, including over 100 homes or businesses that were destroyed or had major damages.



Seated around a long table in a break-out room of the Pierce County Emergency Operations Center (EOC), Citizen Corps⁴ representatives from many local non-governmental organizations, faith-based, and government agencies discussed the impact the storm was having on residents.

The agencies⁵ represented in the room were experienced at helping people in crisis. Working independently, none of them could handle all of the requests they received for services. Each had strengths and capabilities, but also limitations in the scope of missions or depth of resources. Over the days and weeks working together, the group learned ways to tap into their respective strengths and partnered to provide solutions to emerging needs. A Disaster Survivors Advocacy Team was formed to meet victims' needs.

1. Best Practices

- The Disaster Survivors Advocacy Team (DSAT) working in the EOC became a one-stop-shop where residents could call and get help. Disaster victims were guided to where they could get ruined clothing replaced; where food, temporary shelters and sometimes even housing was available; and where transportation vouchers could be obtained so people could get to work. Having a single focal point for service helped reduce victims' stress and promoted faster and more efficient delivery of solutions to their needs.
- The participating agencies developed a singular mindset: what was the best way they could work together to meet victims' needs. The focus became what could be accomplished as a team rather than what a given agency might do. The ultimate goal was to make sure the residents' needs were being met, and not have them drop through the cracks.
- The DSAT is firmly linked into EOC operations and is included in the appropriate Emergency Support Functions. Participating agencies take part in activations when required as well as regular training activities. These efforts help promote continuity and efficient and effective response.

⁴ In January 2002, President George Bush launched Citizen Corps to capture the spirit of service that emerged throughout our communities following the terrorist attacks of September 11, 2001. Citizen Corps was created to help coordinate volunteer activities that will make our communities safer, stronger and better prepared to respond to any emergency situation.

⁵ DSAT Participants included: The American Legion, Associated Ministries, Church of Jesus Christ of Latter-day Saints, Rainier Chapter of the American Red Cross, The Society of Saint Vincent De Paul, Pierce County Department of Emergency Management, Pierce County Aging and Long Term Care, The Salvation Army, the Southern Baptists, the United Methodists Church, and United Way 2-1-1.

Citizen Corps Council of Pierce County became a recognized 501 (c) (3) program. In reaching this milestone, the DSAT could access the data management tools through the Coordinated Assistance Network (CAN). CAN harnesses the power of the Internet through a centralized database, resulting in shared, secure, up-to-date information about disaster victims and their needs and the timely delivery of services without duplication of efforts.

2. Lessons Learned

- Great crises often spawn innovative thinking. At times like this, social service agencies and emergency management professionals excel at being able to forge new relationships and develop creative solutions.
- As the number of participating agencies and their opportunities to work together increased, trust also increased and a greater understanding of each agency's strengths and limitations emerged. This helped the agencies work more efficiently and more effectively.
- After the immediate crisis passes (three or four months later), needs still remain. Because
 they are now acting as a more cohesive team, DSAT members are in a better position to
 follow through and make sure those needs are addressed.
- As the DSAT gained more experience, they also began to explore the best way to support shelter operations. In some instances this means deploying DSAT member staff as needed and in other instances it has meant training shelter staff.

3. Other Comments

The Citizen Corps Council of Pierce County (CCC-PC) was the winner in the "2010 National Citizen Corps Achievement Award in the Collaborative Preparedness Planning" category. As part of CCC-PC, the Disaster Survivor's Advocacy Team (DSAT) was cited for their efforts to create an environment where nonprofit, faith-based, private sector and government agencies work together to help residents recover from a disaster.

4. Regional Contact Information

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J. Skagit County - Emergency Management Governance

The Skagit Emergency Management Council (Skagit EMC) was created on May 5, 1981 for the purposes of consolidating emergency planning efforts and sharing the costs of providing an emergency management program for Skagit County as well as the incorporated municipalities within the County. A companion agreement was signed by the County Commissioners and the Mayors of Anacortes, Burlington, Concrete, Hamilton, La Conner, Lyman, Mount Vernon and Sedro-Woolley on September 1, 1981. The Skagit EMC is comprised of the Board of County Commissioners and the mayors of the aforementioned cities.

Today, 30 years later, the Skagit EMC remains a strong and viable organization that oversees the Skagit County Department of Emergency Management and the Skagit 9-1-1 Center. Both agencies, as well as the Skagit Emergency Medical Services

"The heart of the management [Leadership] challenge is to know how to deal with the problems created by imperfect information, imperfect control, and imperfect decision making."

Jo Owen, Hard-Core Management

(EMS) Commission, are collocated within the Skagit County Consolidated Communications Center. The EMS training room was constructed and equipped as a dual-use facility and serves as the Skagit County Emergency Operations Center (EOC).

The Skagit County Department of Emergency Management shares office space with and oversees the Skagit County Fire Marshal's Office. Emergency management and fire marshal personnel are cross-trained and jointly provide staffing for a 24-hour Duty Officer. Fire Marshal personnel also fill various command and general staff positions within the Skagit County EOC organization.

- The Skagit EMC and the programs it directs are excellent examples of local governments partnering to accomplish what none of them could do by themselves. Focusing on their common needs in public safety and emergency management has enabled Skagit EMC to maintain cost effective and highly successful programs.
- The Skagit County Department of Emergency Management (Skagit DEM) leverages their collaborative model wherever possible. In 2002, they partnered with Skagit County Dike District #12 and the City of Burlington to begin the development of a multi-jurisdictional hazard mitigation plan to meet the requirements of the Disaster Mitigation Act of 2000. Upon its completion in 2003, the Skagit County Natural Hazards Mitigation Plan included nine jurisdictions, three Indian and 41 special purpose districts. The plan was the first multi-jurisdictional mitigation plan approved by FEMA within the State of Washington. The plan was updated in 2008 and the revised document was approved by FEMA in April, 2009.
- For over 25 years, Skagit DEM has partnered with local elected officials, County and municipal agencies, local dike districts, the National Weather Service and the United States Corps of Engineers to deliver annual flood response training and a flood awareness campaign to the citizens of Skagit County as part of Skagit County Flood Awareness Week activities. Each year during the month of October, personnel from numerous local agencies update local flood response plans and partner with their counterparts from the Corps of

Engineers to devote up to a full week in preparing for flood incidents within Skagit County. This combined flood preparedness effort is vital to maintaining an effective flood response organization within Skagit County.

In 1985, local chemical and petrochemical industries located on March Point partnered with the Skagit County DEM and other local agencies to form the March Point Community Awareness Emergency Response (CAER) organization. Today, the industrial members of March Point CAER are Air Liquide, General Chemical, Shell Puget Sound Refinery, and Tesoro Refining and Marketing Company. Other members include Summit Park Fire Department, City of Anacortes Fire Department, the Swinomish Indian Tribal Community Police Department, Island Hospital, the Islands Chapter of the American Red Cross, and the Skagit County Department of Emergency Management.

The purpose of the March Point CAER organization is to prepare and maintain an emergency response plan and to communicate the essential elements of that plan to the community. The group also works in cooperation with local government organizations including the Skagit County Local Emergency Planning Committee (LEPC). The March Point CAER organization has benefitted the citizens of Skagit County through an increased level of emergency planning and drills as well as greater coordination and cooperation between industry and agency members.

- Because of limited personnel, Skagit DEM partners with the Skagit County Sheriff's Office, the Skagit County Public Health Department, and the Skagit County Public Works Department to form a standing Unified Command during emergency incidents. As a group, designated representatives of each agency provide oversight of response activities and EOC operations. This system has worked well for several years. Minor improvements are made, as needed, based on lessons learned during each incident.
- Skagit DEM has had a long-standing commitment to support the Northwest Incident Management Team (IMT). Skagit DEM has participated in the formation of the IMT governance board, the development of the team and the purchase and maintenance of team assets. In addition, the Skagit County Homeland Security Coordinator currently fills a Deputy Incident Commander position as a member of the team.

2. Lessons Learned

- For a number of reasons (scarcity of resources, easier relationship management, common purpose, etc.), smaller contiguous units of local government can often form very effective working relationships with one another. The formation of strong and lasting partnerships helped build and maintain the emergency management organization within Skagit County.
- Due to the Skagit River and its geographic location, Skagit County is highly vulnerable to flooding and severe winter storms. These natural hazards have provided Skagit DEM with numerous opportunities to become familiar with the disaster recovery process. Since 1981, Skagit County has been included in 13 federal disasters and the County has received approximately \$98 million in public and individual disaster assistance. This has been accomplished with assistance provided by their local partners and with the strong support of the Washington State Emergency Management Division, the United States Corps of Engineers and FEMA. Disaster recovery in Skagit County is truly a group effort.

 Successful collaboration often leads to more collaboration and additional partnership opportunities. Skagit DEM's participation in the Puget Sound Regional Catastrophic Preparedness Program has increased its level of disaster planning and regular meetings have provided opportunities to strengthen jurisdictional relationships and gain knowledge from fellow emergency management professionals.

3. Regional Contact Information

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K. Snohomish County - Patient Evacuation and Relocation

The National Disaster Medical System (NDMS) is a federally coordinated system that augments the nation's medical response capability. The overall purpose of the NDMS is to supplement an integrated national medical response capability for assisting state and local authorities in dealing with the medical impacts of major peacetime disasters and to provide support to the military and the Department of Veterans Affairs medical systems in caring for casualties evacuated back to the U.S. from overseas armed conventional conflicts.



The National Response Framework utilizes NDMS as part of the Department of Health and Human Services under Emergency Support Function #8, Health and Medical Services, to support federal agencies in the management and coordination of the federal medical response to major emergencies and federally declared disasters including:

- Natural disasters
- Major transportation accidents
- Technological disasters
- Acts of terrorism including Weapons of Mass Destruction events

Part of the mission of NDMS is to provide supplemental medical services deployable to a disaster site, a patient evacuation system, and pre-identified non-federal hospitals that can provide definitive medical care. In order to fulfill this portion of their mission, NDMS must find local agencies with the appropriate resources to meet their needs and develop partnership agreements.

Patients evacuated from a disaster area arrive at a Patient Reception Area. Patients are off-loaded, triaged and staged at the Patient Reception Area and then moved via ground transport to approved local NDMS partnering hospitals. Providence Regional Medical Center is the Regional Disaster Medical Control Center (DMCC) for Snohomish County. The DMCC is a facility designated to coordinate pre-hospital patient care and patient distribution between EMS and hospitals within Region-1. The responsibilities of the DMCC include initial notification and communications and patient distribution. During NDMS activation, the DMCC will coordinate activities with the Federal Coordinating Center (FCC). Both military and non-military aircraft can be used to transport disaster patients.

Snohomish County Airport/Paine Field is the major general aviation/industrial aviation airport serving Snohomish County and several communities located in the northern portion of the Seattle Metropolitan Area. The airport supports some of the production needs of the Boeing Company, several flights schools and other related services. The Snohomish County Department of Emergency Management is located adjacent to Paine Field.

As part of their continuing needs to establish Patient Reception Areas, Puget Sound Federal Coordinating Center staff helped initiate discussions with Snohomish County DEM and Snohomish Public Health to get Paine Field established as a Patient Reception Area for Washington State Homeland Security Region-1. From inception to completion, the process took

approximately 18 months to complete. Paine Field is the first non-Department of Defense airport in Washington, Oregon and Idaho to have been given this designation.

1. Best Practices

- Due diligence was applied in selecting Paine Field as a suitable location. Not only do they
 have excellent facilities, but the physical infrastructure is likely to survive foreseeable
 earthquakes, an important consideration in the Puget Sound area.
- The participants in the discussions were initially limited and only expanded later in the coordination process. Local NDMS staff, Snohomish County DEM, and County public health staff all had vital interests in this issue. Given the length of time required to complete all negotiations, it may have been difficult to keep a larger, more diverse group together.
- King County, which is adjacent to Snohomish County, is the home for Harborview Medical Center, the only Level 1 Trauma Center in the Region and one of the country's premier trauma facilities. The Snohomish County team used Harborview to validate their approach.
- At the appropriate time, other stakeholders were involved and now the stakeholder group that participated in the validation planning, drills, and exercises includes: Snohomish County DEM, Snohomish Health District, Medical Reserve Corps, Snohomish County Chapter American Red Cross, Rural/Metro Ambulance, Everett Transit, Snohomish County Sheriff's Office, Paine Field Fire, Castle & Cooke Aviation, Airlift Northwest, Providence Regional Medical Center, Swedish/Edmonds Hospital (Formerly Stevens), Harborview Medical Center, Washington State Department of Health, Washington State Emergency Management Division and FEMA Region-X.

2. Lessons Learned

- It is vitally important to have credible leadership on initiatives like this that are often bureaucratic and time consuming. NDMS has gone through this process with other jurisdictions and their local staff, the Puget Sound FCC Area Coordinator, provided the steady leadership required to get this agreement in place.
- As is often the case with projects like this, once relationships have been developed through the course of getting initial tasks completed, staff often rely on those new relationships for other purposes. In many respects, this is one of the ongoing legacies of the UASI grant program.
- Especially with a large number of stakeholders, including those with a financial interest in the agreement and operations, it is important to choose a suitable initial term for any formal agreements. Having an initial term of one year made it relatively easy to get an agreement in place and to confirm reimbursement rates and mechanisms.
- One of the fringe benefits of this agreement is that it has helped underscore the importance of the Snohomish County Medical Reserve Corps which will play an important role whenever the agreement is activated.

3. Regional Contact

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L. Thurston County – Advanced Instructor and Facilitator Training

Like other emergency management agencies, Thurston County is charged with providing National Incident Management System (NIMS) training. To insure that all topics are covered, the Department of Homeland Security and the Federal Emergency Management Agency require each local jurisdiction to use the same curriculum, often referred to as the "canned" curriculum because all of the instructors present the same slides, use the same examples, classroom exercises and the same provided talking points. While the curriculum ensures that all the necessary information is covered, and the test at the end of the session is used as a measure that participants learned what was expected, there really is no assurance that when participants return to their job assignments they will remember and apply what was covered during the training session. As managers evaluated the overall training program and reviewed participant feedback, one of the goals was to provide more interactive and engaging training programs so that training

For learning to take place with any kind of efficiency students must be motivated. To be motivated, they must become interested. And they become interested when they are actively working on projects which they can relate to their values and goals in life.

Gus Tuberville, President, William Penn College

would be more valuable and participants would retain the training materials.

One of the other unmet needs that was being addressed at approximately the same time was the development of a Countywide all hazards incident management team (IMT). The level of trust and buy in for the IMT was initially low because some of its members were not well known in the County's emergency responder community. The IMT members were Incident Command System subject matter experts. Using them as trainers would help build relationships and trust. Before assigning the IMT members to teach classes, they were first given interpersonal skills training to make them effective trainers and the curriculum was augmented to make the classes more fun and participatory. Class evaluations have soared and there are now waiting lists for classes.

- To promote credibility, true local subject matter experts were chosen to be lead instructors.
 Lead instructors were typically augmented by other staff to help build overall training capacity.
- To be most effective, training programs need to be self-perpetuating. Part of this means that lead instructors need to be identifying and developing new trainers with both technical as well as facilitation skills.
- Instructors were trained to be trainers before they were assigned classes. Training materials were revamped to make them more interesting and memorable. Participatory exercises were provided wherever possible. All of these ingredients helped develop training programs that were much better received by class participants.

 Having people who will be involved in incidents involved in training helps with relationship development. Once relationships have developed, they will be used elsewhere when other needs arise.

2. Lessons Learned

- In order to produce the best exercise possible, it is necessary to hold facilitated workshops and meetings to gather input for the exercise design process. These workshops helped participants develop strong group facilitation skills that increased productivity at the facilitated meetings.
- Initial participant feedback strongly validated the change in training program direction.
 Participants highly valued the new exercises that were more fun and engaging.
- Investing time and resources to improve trainers' interpersonal skills competencies paid great dividends. The trainers really valued improving their interpersonal skills as that made them more effective. This was reflected in class evaluations as well.
- When training is effective, agencies will find resources to fund future activities, even in the face of declining resources.

3. Regional Contact Information

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Section IV. Conclusions and Observations

Throughout our discussions with the catastrophic planning project staff as well as program administrative staff, there were a number of recurring themes in both the best practices as well as lessons learned areas. Not surprisingly, these themes often appeared in the development of the vignettes on other successful projects or initiatives in the Region.



1. Building, Expanding and Managing Relationships

One of the oft-cited critical success factors for projects is proper stakeholder identification and involvement. Virtually all of the Project Leads discussed their efforts to identify the appropriate stakeholders for their projects and their efforts to manage stakeholder involvement during project development. A core group of stakeholders, those with the most vital interests, was sometimes used to help make sure preliminary discussions were focused and manageable. Additional stakeholders were often subsequently involved as needed. FEMA helped to ensure the appropriate federal representatives were involved. This approach can be used to help strike the right balance between inclusiveness and making the best use of everyone's time. This is not a trivial issue with large scale planning where the same stakeholders are often involved in many projects. Without good stakeholder management, fatigue can often set in and support wanes. Completion of the planning projects, let alone post project follow through, then becomes much more problematic.

Project Leads often took their discussions out to the stakeholders' sites rather than relying exclusively on e-mail, phone calls or group meetings to gather the information they need. This sends a strong message of respect that can be very valuable in helping to ensure stakeholders are actively participating in project development as well as supportive of the results.

One significant byproduct of the planning was the establishment of ongoing relationships between individuals and organizations. Bringing together diverse sets of individuals helped in this process of building relationships between new team members and strengthening the bonds between existing neighbors. An outcome of the planning and relationship building is the establishment of stronger bonds of trust. When disasters inevitably strike, the people involved will know one another, will have worked together and have learned to rely on one another for help during emergencies and disasters all the way up to and including catastrophes.

One of the areas where stakeholder involvement could have perhaps been stronger was in the private sector where one of their primary representatives noted a number of missed opportunities for private sector and critical infrastructure representative involvement across the program. While this comment came from one individual, it is worth noting as private sector involvement in emergency management has been one of the Region's strong assets over the years.

The Region has also been working to strengthen its working relationship with the various Tribal governments located in the Puget Sound area, yet based on input from one of their representatives, continued dialogue to find the best way to obtain Tribal participation is needed.

The Regional Catastrophic Planning Team is comprised of managers or directors who typically are the direct manager of a local government emergency management program, senior managers with emergency management responsibilities from private sector organizations or in the leadership of Tribal government. Keeping a large and diverse working group informed and engaged on project activities can be a challenge. Periodic group meetings and status e-mails can be good tools to keep the group informed and to get decisions made. Newsletters helping to highlight successes and upcoming events is another tool worthy of consideration. Here is an example from one of the East Coast planning groups:

http://www.regionalcatplanning.org/documents/CatastrophicResponse_Newsletter_v7.pdf

2. The Importance of Senior Leadership Commitment

If you look at just about any top ten list of why projects succeed or fail, senior leadership involvement and commitment is almost always included and is frequently cited as one of the highest critical success factors. During interviews with project leads, in discussions with program administrative staff, as well as during our research on other regional projects and initiatives, management support was often identified as one of the key contributors to the success of project initiatives. Especially in today's environment where overall staff levels have been cut back due to declining revenues and the remaining staff is required to absorb additional duties, without strong management support for one more time consuming special project, that project is likely to achieve sub optimum results.

Related to senior leadership involvement is support from elected officials. Washington State is fortunate in that both State as well as local elected officials understand and support emergency management planning, preparedness and response. It is not uncommon to see them directly and appropriately involved in disaster response and recovery operations.

3. Regional Planning is Different

Regional planning is not just local emergency management planning taken to another level. Regional planning requires different approaches.

- There is a need for dedicated regional administrative staff to administer grant funds and to establish and monitor grant/planning sub-contracts that are project driven. Staff resources available to even the larger jurisdictions in the Region would not allow them to undertake these efforts without State or federal funding supporting the effort.
- Regional projects require planners and consultants to think differently. There can be a need to compromise between potential planning solutions due to differences of opinion between the participating organizations about the best methods to take on various planning scenarios. Planners have to set aside the needs and biases of their parent organizations to work effectively with a regional approach that does not favor one jurisdiction over another.
- For this catastrophic planning effort and others in the nation, there is often a mix of very large organizations in an urban environment and smaller, rural jurisdictions. Each has differing capabilities and needs associated with preparing for and responding to disasters. Engaging the smaller jurisdictions that have limited staff resources and keeping them engaged in the planning effort as true partners can be a daunting challenge for them and the people charged with doing the planning. However, because they are highly resource

constrained, some of the most creative and best solutions may come from smaller jurisdictions.

- Actual events, declared disasters or major exercises can intersect with the regional planning effort. Real world events will always trump the planning effort and this potential for a conflict in priorities needs to be planned for in developing the planning timeline.
- Regional planning takes more time because of the larger number of stakeholders who need
 to be consulted with. All the participants are doing regional planning on top of their normal
 duties and personnel resources are highly constrained and often overbooked.
- It is very difficult to foresee all of the intersections between plans in large scale program planning. With nine planning projects going on concurrently, regular coordination meetings with Project Leads and the Regional Catastrophic Planning Team were important tools for keeping the overall work on track and getting timely resolution of any issues between projects.

4. Ownership by Project Leads

This is another one of the regularly identified critical success factors for just about any project. If the individual project managers or project leads are not fully invested in their projects, it is hard to achieve optimal results and meaningful follow through once initial planning has been completed. During interviews and follow up discussions, one of the things that impressed the consulting team was the strong sense of ownership exhibited by the Project Leads. They were glad to talk about their projects and its importance to the Region, proud of their accomplishments and candid about remaining work. We sensed this same level of ownership, commitment and pride in the discussions used to generate the vignettes on other successful projects and initiatives in the Region.

Additionally, the assignment of and tenure of Project Leads remained consistent throughout project development across all projects. This continuity in the leadership assisted in the successful completion of the projects. Another aspect of the planning environment is that in the last 20 years there has been a significant increase in the number of emergency managers working at the city level, especially in King County. The above, along with previous regional planning efforts that ranged from a regional disaster plan, Y2K planning, pandemic flu planning, the Green River Flood Response contributed to all the participating agencies having relationships in place between individuals. This provided a strong basis of trust within which to commence and continue the planning effort.

5. Development of Scalable Solutions Where Possible

The consulting team was impressed by the number of instances where project staff chose to develop scalable tools or solutions that could be used for large scale disasters and the "normal" run of the mill emergencies. The Puget Sound Region has yet to experience a truly catastrophic event and from several different perspectives, designing the individual regional catastrophic plans so they can be used for additional purposes makes a good deal of sense. It helps keep the plans from becoming stale through lack of use and leverages the good planning work for other regional or local emergency management responses where possible. Staff and program administrative staff are to be commended for taking this approach.

6. Private Sector Involvement

Even though we noted in an earlier comment that private sector involvement could have been stronger in this current group of catastrophic planning projects, we were still nonetheless impressed that project leads were very cognizant of the importance of private sector and other stakeholder involvement in their planning efforts and made attempts to get them involved at appropriate junctures. Even though our Region has a long and successful tradition of involving the private sector in emergency management plans and activities, it is an area that requires continued diligence. It appears that the engagement of the private sector has shifted over the past few years to Washington State Emergency Management Division with their establishment of an office with that focus. While the state level emphasis is admirable, the corresponding level of engagement at the regional level has diminished overtime and may warrant reconsideration.

7. Use of Consulting Resources

While not every planning project employed the use of external consultants, the vast majority did. For those projects using consultants, the most successful projects were those that used consultants with strong subject matter expertise, excellent facilitation and project management skills and good local knowledge (either through working as an employee or through prior consulting engagements). In a few instances, consultants had done comparable work for other areas of the nation and had resources that could be quickly and efficiently customized to meet regional needs. When this was coupled with strong Project Lead, stakeholder involvement and local knowledge, excellent deliverables were often produced.

Using consultants is not a requirement for a successful project. There are some instances when consulting resources may not be needed for a given project, either because fully capable staff resources are available or because the requisite subject matter expertise would be developed. While consultants can be valuable resources to get project work accomplished, they bring with them the risk that local staff may not embrace the plan or be able to perform follow up work after the consultants leave.

8. FEMA and State Participation

Project Leads were very complimentary of the support they received from State and FEMA staff involved with the planning projects. FEMA was actively engaged in the project planning and support efforts and brought other federal agency representatives to also contribute to the planning effort. At least initially, and especially with State staff, there was some question about their roles in project development as well as plan review. Since the State also has a role in catastrophic planning and preparedness, it is possible that there were missed opportunities to share information as well as a potential duplication of effort. In future planning efforts, both State and local planning staff should work together to address the roles and responsibilities issues up front and capitalize on the efforts of both levels of government that need to be mutually supporting their work.

9. The Need to Develop More Integrated Social Media Strategies

Pacific Northwest agencies, especially Washington State, King County, and the City of Seattle, have long enjoyed a reputation for being leaders in e-government, so it is not too surprising that many of the regional emergency management projects and programs would be taking advantage of social media tools, especially Twitter and Facebook. These can be great

resources to help with information dissemination as well as to improve situational awareness. Added to the current mix of new initiatives, the Region also has resources such as RPIN and NW WARN that have been used for many years to help with information dissemination.

With the increased propagation of social media usage and adaptation to emergency management purposes, it may be beneficial to review existing communication resources and develop a more comprehensive and unified regional approach. While there are certainly advantages to the separate jurisdictional communications promoted by the use of Twitter and Facebook, there are limitations as well.

10. Catastrophes Are Different

By their nature, catastrophic events involve extraordinary levels of casualties, damage or disruption that will likely immediately overwhelm State and local responders— circumstances that make sound planning for catastrophic events all the more crucial. A catastrophic incident is not merely a large version of a routine emergency and cannot be managed merely with more personnel and equipment. Catastrophes create an enormous demand for effective coordination and communication. They exist over large areas and long time horizons, they involve cascading impacts and overlapping problem sets, every one of which can require large and complex responses.

The Puget Sound Region has yet to experience a truly catastrophic event. The vast majority of the emergency management staff involved in catastrophic planning, Project Leads as well as Regional Catastrophic Planning Team members, have no direct experience in a catastrophic event. This can make it more difficult to fully plan for a catastrophic event.

11. The Need for a More Formal Project Review Methodology

While the consulting team was not tasked with a formal review of the nine catastrophic plans, they did read them to help gather information for use on the Best Practices/Lessons Learned Project. One of their observations was that it might be desirable to develop a formal set of project standards as well as a project review methodology to help promote the highest quality future products. Several different approaches to project reviews can be used (peer teams, independent reviewers, etc.) but by establishing the standards, expectations and methods up front, better initial and final products are often the result.

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